

[C.L.]

ANNUAL REPORT



ANNUAL REPORT

ON THE

HEALTH

OF THE

BOROUGH OF CHESTERFIELD

FOR 1914,

BY

F. A. SHARPE,

M.D. Lond., B.S., D.P.H.,

MEDICAL OFFICER OF HEALTH.

CHESTERFIELD:

WILFRED EDMUNDS, LTD., PRINTERS,

1915.



ANNUAL REPORT
ON THE
HEALTH
OF THE
BOROUGH OF CHESTERFIELD
FOR 1914,
BY
F. A. SHARPE,
M.D. Lond., B.S., D.P.H.,
MEDICAL OFFICER OF HEALTH.

CHESTERFIELD:
WILFRED EDMUNDS, LTD., PRINTERS,
1915.

INDEX.

	Page
Acts of Parliament Adopted	4
Administration of the Milk and Cream Regulations, 1912	22
Bacteriological Examination	42
Birth Rate	65-66
Cases of and Deaths from Infectious Diseases	51
Causes of, and Ages at Death during the Year 1914	57
Common Lodging Houses	20
Dairies, Cowsheds, and Milkshops	23
Death Rate	56
Diphtheria	42
Deaths from Tuberculous Diseases	53
Diseases Ill-Defined or Unknown	59
Erysipelas	45
Enteric Fever	52
Food and Drugs	20
Factory and Workshop Report	35
House Refuse	16
Hospital Accommodation	37
Housing	27
Houses Empty, June 30th, 1914	29
House to House Inspections	30
Health Committee	3
Introduction	7-8
Infectious Diseases Notified during the Year 1914...	43
Inquests	60-61
Infant Mortality	68-71
Meteorological Record, 1914	10
Means for Preventing Mortality in Child Birth	62-66
Measles	52
Monthly Incidence of Scarlet Fever and Diphtheria	49
Other Defined Diseases	58
Penmore Hospital	39
Population in the Middle of 1914	12
Physical Features and General Character of District	11
Preparation of Food	23
Puerperal Fever	52
Summary of Annual Health Report for 1914	9
Sewage Disposal	15
Summary of Sanitary Inspector's Work	18
Summary of Sanitary Work of Recent Years	19
Schools	20
Sanitary Conveniences	34
Smallpox	44
Scarlet Fever	45
Tuberculosis	55-56
Vital Statistics of the District	67
Water Supply	14

BOROUGH OF CHESTERFIELD.

HEALTH COMMITTEE, 1913-14.

Chairman :

Councillor W. B. ROBINSON.

Vice-Chairman :

Cóuncillor EDMUNDS, J.P., C.C.

Members :

THE MAYOR (Alderman E. Shentall, J.P.)
Alderman BOOTH, M.D., J.P. Councillor LACK.
,, HADFIELD, J.P., C.C. ,, LANCASTER.
Councillor CLARK, C.C. ,, SHORT.
,, EYRE, J.P. ,, WOODHEAD.
,, GLOSSOP. ,, HODKIN.

HEALTH COMMITTEE, 1914-15.

Chairman :

Councillor W. B. ROBINSON.

Vice-Chairman :

Councillor EDMUNDS, J.P., C.C.

Members :

THE MAYOR (Alderman E. Shentall, J.P.)
Alderman BOOTH, M.D., J.P. Councillor LACK.
,, HADFIELD, J.P., C.C. ,, LANCASTER.
Councillor CLARK, C.C. ,, SHORT.
,, EYRE, J.P. ,, HODKIN.
,, GLOSSOP. ,, HIND.

Medical Officer of Health :

F. A. SHARPE, M.D., B.S. Lond., D.P.H.

Inspector of Nuisances :

CHARLES E. WOOD, C.S.I.

Assistant Inspectors of Nuisances :

A. S. CARTER, C.S.I., Certif. Meat. Insp.

A. BIRKBECK.

Health Visitor :

Miss ROBERTSON, A.R.San.I., C.M.B.

Tuberculosis Health Visitor :

Miss M. JONES, C.M.B.

Clerks :

J. H. MENNELL.

Miss W. BEARDSLEY.

Veterinary Inspector :

FRANK B. PEARSON, M.R.C.V.S.

LISTS OF ACTS OF PARLIAMENT ADOPTED BY THE COUNCIL.

Infectious Diseases (Notification) Act 1899, adopted October, 1890.

Infectious Diseases (Prevention) Act 1890, adopted November, 1890.

Public Health Acts Amendment Act, 1890, adopted March, 1891.

Private Street Works Act, 1892, adopted March, 1893.

Parts 3, 4, 5 and 6, and sections 15 to 25, and 27 to 33 of Part 2, and 94 and 95 of Part 10 of the Public Health Acts Amendment Act, 1907, adopted March, 1910.

Notification of Births Act, 1907, adopted November, 1907.

LOCAL GOVERNMENT ACT, 1894.

Powers conferred upon the Council by the Act.

The Granting of Pawnbrokers' Certificates.

The Licensing of Game Dealers.

The alteration of dates of Fairs.

The duty of protecting public right of way.

Powers conferred by the Local Government Board.

To appoint Overseers.

To appoint and revoke the appointment of Assistant Overseer.

The Powers of a Parish Council as to Charities.

PRIVATE ACTS.

The Chesterfield Corporation Markets Act, 1873.

The Local Government Board's Provisional Order Confirmation (No. 14) Act, 1892 (Borough Extension).

Electric Lighting Orders Confirmation (No. 1) Act, 1894.

The Chesterfield Improvement Act, 1901.

The Chesterfield Corporation Tramways and Improvement Act, 1904.

The Local Government Board's Provisional Order Confirmation (No. 6) Act, 1910 (Borough Extension).

The Chesterfield Corporation Railless Traction Act, 1913.

The Chesterfield Corporation Act, 1914.

CHESTERFIELD CORPORATION ACT, 1914.

The Powers relating to Sanitary Matters, obtained in the Chesterfield Corporation Act, 1914, included :

Information to be furnished to Medical Officer and penalty for furnishing false information (infectious diseases).

Houses infested with vermin to be cleansed.

Restrictions on attendance of children at Sunday School when infectious disease exists.

Cleansing of children and their clothing.

Removal of persons suffering from pulmonary tuberculosis to hospital.

For preventing contact with body of person dying of infectious disease.

Medical examination of inmates of common lodging-houses, etc., when infectious disease prevails.

Removal of body of person dying of infectious disease.

Power to compensate persons for ceasing employment to prevent spread of disease.

Bye-laws as to premises used for manufacturing certain foods.

Discontinuance of offensive trades.

Defining the establishing of a new business (offensive trades).

Cleansing of milk vessels.

Extension of powers of Veterinary Inspector.

Compulsory provision of regulation dustbins.

Power to exclude old and diseased animals from markets and fairs.

Provision of food store accommodation in new houses.

Area of habitable rooms.

The Corporation may order houses to be drained by a combined drain.

Power to require specially large sewer in new street.

Power to lay drains in private streets.

Making of communications between drains and sewers.

For preventing sand, soil, etc., from being washed into streets.

Watercourse choked up to be a nuisance under Public Health Act, 1875.

Watercourses not to be covered over except in accordance with approved plans.

Prohibiting entry of petrol, etc., into sewers.

*To the Chairman and Members of the Public
Health Committee of the Borough of Chesterfield.*

Gentlemen,—

I have the honour to submit to you the Annual Report on the health of the Borough for the year 1914.

The rapid increase in the population referred to last year is still a marked feature. A slackening in the number of new houses erected (127 as against 178 last year) is making itself felt in the diminished choice available for intending residents. In the whole Borough there were on June 30th only eight houses vacant which were within the limit of rent defined in The Housing and Town Planning Act, that is £16 per annum. The serious shortage of houses indicated by these figures is worthy of your Committee's attention.

I am glad to be able to record that the privy midden system, so often referred to in these reports and in those of other Public Health Officials as a standing menace to health, has received your serious consideration, and that a scheme for its complete conversion to the water carriage system is now in its final stages of preparation.

The epidemic of diphtheria referred to last year has continued without any abatement; a simultaneous epidemic of scarlet fever taxing our resources to their utmost.

The County Council's arrangements for the reception of cases of Tuberculosis were completed at the end of the year, cases being admitted to the Phthisis Pavilion, Penmore Hospital, on June 1st, 1915. The main Sanatorium at Walton is now ready for patients, so that we may say that in this district there is a comprehensive and efficient system inaugurated for the treatment of tuberculosis.

The infantile mortality for the year stands at the low figure of 103. This year is the first year on record where the Borough rate of infantile mortality is below that of England and Wales.

The Consultation Centre for Infants established at the Settlement has been supplemented by the opening of three more, one each in the North, South and West Wards. I have a very high opinion of their educational value.

The Corporation Act, 1914, contains many sanitary clauses which will widen the activities of the Department. New legislation, increase of knowledge, and an enlightened public opinion are constantly placing new burdens on the officials of the Department which have not yet been adequately met by an increase in the staff.

In conclusion, I beg to acknowledge the help given by the Corporation officials and the kindly consideration shown by your Committee.

I am,

Your Obedient Servant.

F. A. SHARPE.

SUMMARY

OF ANNUAL

HEALTH REPORT FOR 1914.

BOROUGH OF CHESTERFIELD.

Area—Land, less inland water, 2625 acres ; inland water, 18 acres ; total, 2643 acres.

Altitude (average)—About 300 feet above ordnance datum.

Population, Census for 1911—37,406. Separate occupiers or families, 7,711.

Estimated Population, June 30th, 1914—40,465.

Occupied Houses—8,259.

Rateable Value—£141,303.

General District Rate—4/3 in the £.

Poor Rate—4/11 in the £.

VITAL STATISTICS, 1914, per 1,000 living.

Birth Rate—29·6.

Crude Death Rate—16·7.

Death Rate (Corrected)—13·5.

Epidemic Diseases Death Rate—1·1.

Phthisis *do. do.* —1·03.

Other Tubercular Diseases Death Rate—0·34.

Respiratory Diseases *do. do.* —2·36.

Infant Mortality, per 1,000 births—103.

Isolation Hospitals—Penmore Isolation and Small Pox Hospitals.

Water Supply—From Linacre Reservoirs and Holymoorside Whispering Well.

TABLE.—METEOROLOGICAL RECORD, 1914.

Rain Gauges, 5 inches in diameter at Gas Works, and 8 inches at Linacre Reservoir, 1 foot above ground ;
 279 feet above sea level at Gas Works, and 500 feet at Linacre Reservoir.
 Temperature taken in shade and 4 feet from the ground.

MONTH	Temperature of Air during Month.			Mean Temper- ature of Air	Rainfall					
	Highest	Lowest	Mean of		Number of Days on which Rain Fell		Amount Collected in Inches			
			All Highest					All Lowest		
January ..	55	12	43.19	34.06	Gas Works 10	Linacre Reservoir 16	Sewage Works 12	Gas Works 1.07	Linacre Reservoir 1.70	Sewage Works 1.16
February ..	57	29	49.85	37.17	14	15	14	1.56	2.54	1.71
March ..	59	25	48.93	35.45	20	23	21	2.24	2.91	2.28
April ..	74	28	60.13	37.20	8	9	8	0.93	1.10	1.00
May ..	74	24	59.83	40.67	8	11	9	0.99	1.29	1.14
June ..	84	33	68.63	47.63	5	8	7	1.78	2.77	1.49
July ..	86	44	70.16	53.03	14	18	14	3.56	4.04	2.57
August ..	80	40	70.61	50.41	12	14	10	0.90	1.61	1.28
September ..	82	29	65.40	44.56	9	9	9	1.29	1.44	1.21
October ..	63	32	58.00	43.06	14	12	12	2.56	2.84	2.24
November ..	58	24	49.33	37.06	16	17	18	3.07	4.39	3.04
December ..	54	26	43.94	34.51	22	23	23	5.40	6.70	5.70
Entire Year ..	86 (a)	12 (b)	57.33	41.21	152	175	157	25.35	33.33	24.82

(a) July 21st. (b) January 1st. (c) Greatest amount on one day 1.34 on July 2nd.
 (d) Greatest amount in one day 1.00 inches on July 2nd, 0.82 inch on June 18th and December 27th.
 (e) Greatest amount on one day 0.85 inch July 1st.

REPORT.

A.—NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

(1) PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.—The area of the Borough previous to November 9th, 1910, was 1,216 acres, 18 of which are covered by water; that of the Extended Borough is 2,643 acres.

The greater part of the town is built upon a tongue of land projecting in an easterly direction from the high land of Newbold and Dunston into the valley of the Rother, the remainder being situate to the north, east and south of this in the valleys of the Hipper and the Rother, which join here after the Rother has received the Muster brook. The joint stream discharges into the disused Chesterfield and Stockwith Canal, which overflows in time of heavy rain into its former course, which contains little but the effluent from the sewage disposal works at other times.

The geological formation is clay overlying the trias sandstone of the coal measures, but to the north the surface is largely composed of stones lying in alluvial soil, while most of the West Ward stands on alluvial deposits.

The Old Borough was divided for electoral purposes into three wards—the North, chiefly residential and mercantile, containing the Chesterfield and North Derbyshire Hospital and the Union Workhouse, and the South and West, which contain the principal factories and works.

The extended Borough is divided into four wards—the Central, comprising the principal portion of the old South Ward, and parts of the old North and West Wards; the North, made up of the greater part of the old North Ward and the added Newbold and Dunston area; the South Ward, consisting of the smaller part of the old South Ward and the added Calow and Hasland areas; and the West, including the added area of Brampton and Walton and all the old West Ward except its easterly portion.

The town is a busy one and rapidly increasing. It is served by three lines of railway, two of which now belong to one company, and is the centre of an important colliery and agricultural district.

Large numbers of people enter the town for shopping and recreative purposes by the electric tramway (which is the property of the Corporation), motor omnibuses, and the very numerous waggonettes which ply between the town and surrounding villages.

The main industries are the coal and iron trades, but there are several large mills, engine works, potteries, breweries and tanneries. The shops are very numerous and better than are usually found in a town of this size. The Corporation have now obtained Powers to instal a system of Trackless Trams and Motor 'Buses to further connect the Borough with adjacent districts.

POPULATION IN THE MIDDLE OF 1914.—Estimated by the natural increase—that is, the excess of births over

deaths—the population is 39,152. No account is taken here of immigration and emigration. Estimated according to the method of the Registrar-General, which assumes that the population increases or decreases in a geometrical ratio in any intercensal period at the same rate as in a previous one, the figure is 39,706. Calculated by new houses certified for occupation, less those houses closed, since the Census, plus the difference between houses empty at Census and empty on June 30th, 1914, and corrected for large institutions, the figure is **40,465**, which is used as the basis of the rates in this report.

The population is divided as under (the figures given being approximate only), and calculated on the presumption that the number of empty houses at the Census in the various Wards was in the same proportion as in June, 1913:—

WARDS.

North.	South.	West.	Central.
9436	9575	11438	10016

It is impossible to give any details as to the number of marriages in the Borough, as the area for registration is the Poor Law Union, which includes a large area around the Borough. The same applies to figures relating to Poor Law Relief.

In the middle of the year there were 453 inmates in the Workhouse, and 110 patients in the Chesterfield and North Derbyshire Hospital. I am indebted to Mr. Sunnuck for the following table, showing the steadily increasing use made of the Hospital:—

Year.		In-patients treated.		Out-patients treated.
1902	...	490	...	2103
1903	...	580	...	2390
1904	...	618	...	2701
1905	...	653	...	3764
1906	...	763	...	3944
1907	...	921	...	4193
1908	...	866	...	4725
1909	...	897	...	4687
1910	...	1091	...	5540
1911	...	1102	...	4895
1912	...	1225	...	4716
1913	...	1212	...	5059
1914	...	1398	...	4365

B. - SANITARY CIRCUMSTANCES OF THE DISTRICT.

WATER SUPPLY.—Water is supplied by the Chesterfield Gas and Water Board, whose area of supply includes the Borough, the Urban Districts of Whittington and Newbold. Brampton and Walton, and part of the Chesterfield Rural District. The area supplied is 24 square miles in extent.

The greatest part is collected on a gathering ground above the Linacre Reservoir of 1,386 acres, but there are other works as given below, while a small supply can be obtained in time of need from the mains of the Chesterfield Rural District Council.

Capacity of Reservoirs, 247,746,000 gallons.

Lowest quantity stored during the year, 106,131,000 gallons.

In 1912 the lowest quantity was 209,279,000 gallons.

Present daily consumption, 1,170,000 gallons.

Number of houses supplied, 14,551.

The water contains too much vegetable matter to be considered a first-class supply, but is adequately-filtered. For some years the plumbo solveney of the High Level Supply has been the subject of comment. The matter is fully dealt with in the Report for 1912. Recent tests shew that there is no diminution of this dangerous quality.

SEWAGE DISPOSAL.—The average dry weather flow is 742,440 gallons per diem, as compared with nearly a million and a quarter before the leaks in the sewers were sought for and repaired. The maximum flow is about three and a half million gallons. The sewage, in reaching the Works, passes through a silt chamber, duplicated, where the diminished rate of flow permits of the deposition of the heavier solid matter in suspension. It then goes through a screen which removes the large floating and suspended matter, and enters the septic tanks. These are open, three in number, and have each a capacity of 223,200 gallons; two are in use at once while a third is being cleaned. The solid organic constituents of the sewage are liquified in these, from which the sewage flows to the pumping station, where it is raised by a pump to a sufficient height to allow of its flowing by gravitation to the filters. These are 20 in number, and have a cubic capacity of, roughly, 45,000 cubic yards, capable, at a rate of 84 gallons per cubic yard, of purifying 3,780,000 gallons of sewage per diem. This accounts for four times the dry weather flow. There are two storm-water filters, on to which excess amounts over three times and under six times the dry weather flow are treated. Amounts over six times the dry weather flow were run direct into the old river bed, from which the river water has been diverted above the Sewage Works into the canal. As this is dry in summer, the river bed, consisting of a deep layer of putrefying mud, has been the cause of many complaints as a nuisance. A storm-water tank has been constructed of 100,000 galls. capacity in order to allow sedimentation of the storm-water overflow before reaching the old river bed.

The steam power for pumping the sewage is generated by the refuse destructor, the clinker from which supplies the filtering medium. The sludge from the tanks is mixed with lime and sold to farmers. A more accurate record of the work undertaken by the Sewage Plant will be available in the future; a Lea's Recorder registering up to 300,000 galls. per hour having been installed.

Septic tanks and percolating filters are provided at Hasland, near the Penmore Hospital, and at Calow Lane for the districts of Mansfield Road, Hasland Green, and Calow Lane. These works are satisfactory, but will in all probability be replaced by an intercepting sewer down the Spital Valley brook.

Sewer extensions have been made in Newbold Road, Brockwell Lane, and Spital Lane. This work has abolished cesspools which received sewage from 58 houses.

A sewer has also been laid in St. Augustine's Road, into which the sewage from the New Sanatorium is discharged.

HOUSE REFUSE.—The house refuse removed during the year ending 31st December, 1914, amounted to 18,991 loads, against 19,129 loads, a decrease of 138 loads; 13,237 loads, or 69.6 per cent. of the refuse, passed through the destructor at the Sewage Disposal Works; the remaining 5,754 loads were deposited on tips in the district.

The cost of removing the refuse amounted to £2,557 os. od., against £2,500 3s. 10d. for the year previous, or an increase of £56 16s. 2d. Taking the number of tenements as 8,280, the average cost per tenement is 6s. 2d., as compared with 6s. 0³/₄d. for 1913, the cost per thousand inhabitants being £63 18s. 6d., as compared with £63 last year. Adding to the total wages paid to the night and day workers 5s. 7d. and 2s. 7d. respectively of the working expenses paid through

committee, the cost of emptying dustbins work out at £5 2s. per house, while houses having middens cost £6 os. 8½d. per house.

In hot weather much of the refuse from privy middens was removed in skeps, and deposited direct in carts, thereby reducing the soiling of the street surface. This method, to a small extent, reduces the nuisance caused by the emptying, but it is impossible to avoid creating a nuisance during the process.

There are 2,964 tenements having portable dustbins. These are emptied weekly during the daytime, but in large common courts the refuse is removed twice a week. Midden and ashpit refuse are emptied during the night.

Sanitary Inspections of the District.

SUMMARY OF SANITARY INSPECTOR'S WORK.

Nature of Cases dealt with	Ward.				Total
	North	South	West	C'tral	
Visits to houses infected with Phthisis	17	13	64	78	172
Ditto other Zymotic Diseases	148	132	143	139	562
Inspection of dwelling houses	250	132	141	180	703
" of factories	8	8	36	35	87
" of workshops	79	11	114	124	328
" of premises used for offensive trades	48	7	51	14	120
" of slaughter houses	111	77	287	317	792
" of cowsheds and dairies..	34	43	18	81	176
" bakehouses	30	12	50	46	138
" common lodging-houses..	35	0	84	19	138
" drainage of new houses ...	24	43	28	69	164
Re-inspection of work in progress ..	664	332	615	609	2220
Total Inspections ...	1448	810	1631	1711	5600
Houses disinfected after Phthisis ...	8	6	20	19	53
Houses disinfected after other Zymotic Diseases	66	89	85	79	319
Number of notices issued for abatement of nuisances	92	61	127	149	429
formal	189	73	137	154	553
informal					
Houses repaired	45	44	71	81	241
" cleansed and limewashed ...	6	6	13	5	30
" overcrowded	1	2	6	1	10
Waste pipes defective	12	8	14	6	40
Defective and obstructive drains ...	30	17	35	29	111
" traps and drain inlets ...	49	21	44	49	163
Insanitary privies and middens ..	21	4	12	18	55
Insufficient closet accommodation ...	...	...	2	...	2
Privies converted into water closets	113	4	40	86	243
Water closets defective	27	1	16	32	76
Yard surfaces repaired	42	21	20	26	109
Eaves and downspouts	17	16	28	19	80
Urinals ... ..	...	1	...	1	2
Animals improperly kept ... ..	...	4	1	...	5
Offensive accumulations	7	5	12	19	43
Total ..	370	154	314	372	1210

Summary of Sanitary Work of Recent Years.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Houses closed by Magistrate's Order	3	..	..	..	..
Houses closed after formal notice	2	5	11	5	..	4	14	30	7
Houses closed after informal notice..	..	1	2	1	2	1	2	2	2	10
Houses demolished or disused	1	3	11	30	7	37	20
Houses made fit for habitation	..	13	16	10	35	33	9	13	16	7
Houses repaired..	..	29	26	80	22	156	143	65	161	241
Yards repaired	34	82	88	108	90	95	54	130	109
Overcrowding	25	21	27	21	30	42	28	29	10
Houses inspected	..	1393	760	1125	1174	1016	1219	996	636	703
Conversion of Privy Middens	..	24	31	32	41	64	111	147	205	243
Formal	187	28	47	150	182	139	216	96	446	429
Informal	368	316	289	475	618	867	915	617	358	553

Notices served for
the abatement
of Nuisances.

COMMON LODGING HOUSES.—There are 11 on the register. They were frequently inspected by the Police and Sanitary Officer, and found in a satisfactory condition. The keepers have been notified of the occurrence of cases of small-pox within a near distance of Chesterfield, so that the Sanitary Authority may be notified of the arrival here of contacts. Notice has been served under the Housing and Town Planning Act for closing of one Common Lodging House.

SCHOOLS.—The Medical Officer of Health is also the Medical Officer to the Education Committee. The work of School Medical Inspection is reported on elsewhere.

FOOD AND DRUGS.—108 samples of food were sent to the Borough Analyst, Mr. C. G. Scott Smith. Of these 101 proved to be genuine, while 7, or 6.4 per cent. were found not to comply with the standard adopted by the Board of Agriculture.

Out of 65 samples of Milk 7 or 10.7 per cent. were found not genuine. These seven samples all came from 3 farms outside the Borough. Numbers 381, 385, and 386 came from a farmer who refused to give the retailer a warranty, the milk fat being deficient to the extent of 12.10 and 4.6 per cent. Upon proceedings being heard the retailer was fined 5s. and 17s. 6d. costs.

Number 399a was delivered at the office by a retailer who asked for its examination previous to making a contract for a supply of milk from the farmer. As the non-fatty solids only reached 8.22 per cent., the retailer refused to deal with this man, who has now ceased to send milk into the town.

Numbers 23, 29, and 30 also come from one source. In these cases, as in No. 399a, the farmer refused to give the retailer a warranty with his milk. The samples No. 23 and 29 were purchased from the retailer, the deficiency of milk fat being 12 and 14 per cent. Upon obtaining a sample from the

farm the percentage of fatty solids increased while the non-fatty solids decreased. This being the first offence it was decided that the farmer be cautioned. Four subsequent samples complied with the standard. No. 23 was the only sample of milk in which a preservative was found.

During the year 2 samples of cream were submitted for analysis. One sample purchased as preserved cream contained a Boron preservative in the proportion of 0.33 per cent. Another sample was certified free from Boron preservative.

16 or 53 per cent. of the Margarine and Butter samples were purchased informally. All proved to be genuine.

No samples have been dealt with other than by submission to the Public Analyst.

NATURE OF FOOD.	Number of Samples obtained.	Number Genuine.	Not Genuine.	Prosecutions.	Convictions.	Dismissed.	Cautions.
Milk	65	58	7	1	1	...	2
Butter	27	27	...	...	...	...	...
Cheese	4	4	...	...	...	...	...
Lard	1	1	...	...	...	...	...
Margarine	3	3	...	...	...	...	...
Preserved Cream	1	1	...	...	...	...	...
Cream	1	1	...	...	...	...	...
Baking Powder	1	1	...	...	...	...	...
Ground Rice... ..	2	2	...	...	...	...	...
Cocoa	2	2	...	...	...	...	...
Jam	1	1	...	...	...	...	...
Total	108	102	7	1	1	...	2

PROSECUTIONS, 1914.

Date.	Number of Sample.	CHARGES.	Result	Penalty.	Costs.
29th Jan.	381	Selling Milk deficient in fat to the extent of 12% ...	Convicted	£ s. d. 0 5 00	£ s. d. 17 6

**Report for the Year Ending 31st December, 1914,
upon the
Administration of the Milk & Cream Regulations,
1912.**

1.—Milk and Cream not sold as Preserved Cream.

	(A). Number of Samples examined for the presence of a preservative.	(B). Number in which a preservative was reported to be present.
Milk	66	1
Cream	2	1

2.—Cream Sold as Preserved Cream.

(a) Number of Samples submitted to the Borough Analyst to ascertain if the statements on the label as to preservatives were correct:—

(i). Correct statements made... ..	1
(ii). Statements incorrect	0
	—
Total	1
	—

(b) Determinations made of milk fat in cream sold as preserved cream:—

(i). Above 35 per cent.	1
(ii). Below 35 per cent.	0
	—
Total	1
	—

Each of the Samples obtained complied with the requirements of Public Health (Milk and Cream) Regulations, 1912.

The following is a summary of the work of the last ten years :—

	No. of samples taken	Number Genuine	Number adulter- ated	Percent- age adulter- ated	Caution'd	Prose- cutions	Total Amount of fines and costs imposed
							£ s. d.
1905	80	79	1	1'2	...	1	1 1 6
1906	79	74	5	6'3	3	2	2 6 0
1907	80	76	4	5'0	3	1	dismis'd
1908	83	80	3	3'6	2	1	2 3 0
1909	85	82	3	3'5	...	3	1 18 6
1910	83	77	6	7'2	1	4	7 17 6
1911	105	101	4	3'7	...	4	10 17 6
1912	104	99	5	4'8	1	4	4 9 6
1913	106	103	3	2'7	2	1	1 11 0
1914	108	101	7	6'4	2	1	1 2 6

DAIRIES, COWSHEDS AND MILKSHOPS.—There are 23 cowsheds in the Borough, housing 156 cows. The sheds have been frequently inspected by the Medical Officer of Health and the Sanitary Inspector. All the cows have been examined by the Veterinary Inspector, who reported that all the animals appeared to be in a healthy condition. Twelve milkshops have been regularly inspected and no complaint made except as to neglect of keeping the milk bowl covered, a most important detail which is frequently overlooked by the shopkeepers.

PREPARATION OF FOOD.—During the year all premises used for the preparation of food were inspected. Bye-laws for the control of fried fish shops have been adopted by the Council. Powers were obtained in the Corporation Bill, 1914, for making bye-laws controlling certain food-preparing premises. In 9 cases slaughter-houses, occupied by small traders, are used occasionally for the chopping up and the boiling of food; although many of these premises are regularly cleansed, there is an element of danger in this practice, which should not exist. Food should not be made up in premises where offensive matter is handled.

Twenty-two bakehouses are all used jointly for bread baking and confectionery and are in a satisfactory condition. All are on the ground level.

MEAT INSPECTION.—During the year under review a considerable advance has been made possible in meat inspection by the appointment of an additional inspector. The year's work brings out in a marked manner the absolute necessity of a continuous and systematic inspection which can only be carried out by an inspector devoting his whole time to the work.

As the work of inspection forms only a part of the duties of an official, it is easily seen that the complete supervision of the animals slaughtered is impossible.

Inspector Carter has inspected 42.6 per cent. of the beasts, 19 per cent. of the sheep and 3.5 per cent. of the pigs, or 15.8 per cent. of the approximate number of the animals slaughtered.

The difficulties of inspection arising from the fact that killing is being carried on in most of the slaughter-houses at the same time, will remain until either the meat trade or the Public adopt the far more advantageous abattoir system of slaughtering and dressing meat. Another difficulty inherent in the present system is that the internal organs, such as lungs and intestines are not long retained at the slaughter-houses, being dealt with elsewhere; so that in a case arousing the Inspector's suspicion a fair judgment is difficult.

The absence of a mutual and co-operative compensation scheme among Butchers is bound to subconsciously bias the decision of the Inspecting Officer, the knowledge of the Butcher's severe loss incurred in good faith probably influencing the Inspector in the interest of the Butcher and against the interest of the general Public.

In the Fish trade this difficulty does not exist as the surrender notes given by the Inspector are accepted by the wholesale vendor of the fish and placed to the credit of the local merchant.

There are in the Borough 32 slaughter-houses registered for the slaughter of cattle, sheep, and pigs ; seven of which are the property of the Corporation. Eleven of the total are used for the Pork trade alone, and 4 are not used for various reasons. There are 13 in the Central, 3 in the North, 4 in the South, and 12 in the West Ward. With one exception they may be said to be as reasonably well-situated as possible, taking into account the fact that slaughter-houses are indiscriminately placed among the dwelling-houses of the inhabitants. They have been kept in good condition as regards cleanliness, structural repairs, limewashing and removal of offal.

There are 56 Butcher's shops ; nine of which are connected with the Frozen Meat trade. Their condition is good with the exception that the habit of suspending meat outside the shop to be thoroughly sprinkled with road dust, dies hard.

There is ample and excellent cold storage at the Midland Station. A small quantity of meat is hawked round the outlying and poorer parts of the Town in carts.

The Saturday market is an important one for the whole district. About 25 Butchers have a stand in the Market, 10 of whom kill their meat in the Borough, the remaining 15 bringing in their meat ready dressed from the surrounding districts. The question as to whether the Corporation should require from outside butchers selling in the Chesterfield Market a certificate of inspection from their own district will be raised as soon as the Borough system of meat inspection can itself be said to be reasonably comprehensive.

Turning now to the actual work done in the year. The visits to the Slaughter Houses numbered 699 i.e., 25 visits per

annum or one visit every two weeks to each slaughter house
1007 Beasts, 954 Sheep, and 247 Pigs were examined.

21 Beef carcasses, representing 2.08 per cent. were found to be affected with Tuberculosis to a greater or lesser extent. Only one case was found to be suffering from a generalized infection. The beast before slaughter was in apparent good condition and was bought at a Market price.

The weight of Tuberculous and unsound meat surrendered after inspection was 9cwts. 3qrs. 10lbs. and included 1 Cow, 1 Calf, 10 Pairs of Beast Lungs, 4 Beast Livers, 5 Beast Mesenteries, 1 Spleen, 1 Stomach, etc., 11 Pairs of Sheep Lungs and 1 Pair of Hog's Lungs affected with Strongylosis.

Other articles of food surrendered and destroyed were 68 Rabbits, 76 tins of Fruit, 23 tins of Fish, 15 stones of Mackerel, 16 stones of Herrings, 16 stones of Cod, 2 stones of Cockles, $9\frac{1}{2}$ stones of Prawns, 6 stones of Pig's feet, 27 hampers of Greens, 5 hampers of Radish, and 3 hampers of Onions. The total weight of all food destroyed being 1 ton 4 cwts. 3 qrs. 10 lbs.

In only one instance was a commodity brought to the office by a dissatisfied purchaser. On investigation proving the genuineness of the complaint, the vendor willingly surrendered the whole of the consignment, certain ones of which were found to be of doubtful quality.

Since the Troops have been quartered at the various depots in the Town, periodical inspection of the Meat and Foods supplied to them have been made. The whole of the catering has been in the hands of one local firm, who sublet for their supplies to other local contractors. It is satisfactory to record that the quality has been found to be good.

I cannot lose this opportunity of thanking the members of the Meat trade for the willing assistance they have afforded in carrying out the duties imposed upon the Health Depart-

ment and for their courtesy which has always been extended to myself and the Inspectors.

HOUSING.—Most of the houses occupied by the artizan class are two stories in height and separate tenements.

The through houses occupied by the better class of artizan vary much in plan from the simple 4-roomed tenement, having a living room at the front and scullery at the back, with stairs between the two rooms, all under one roof, to the more elaborate plan giving a scullery and another bedroom under another roof at the back.

The back-to-back houses in the town were the subject of a special report. There are five blocks, the houses are three stories in height, and contain a living room, and scullery at the side of living room, on the ground floor, and two bedrooms on the first floor.

In the Low Pavement area the shops fronting the Market Place were at one time high-class residences with narrow gardens (the width of the houses) running down to the river Hipper. As these dwellings became used for commercial purposes, the gardens were built upon, with the result that the area became closely packed with small artizan dwellings, running in long rows down to the river, separated from the neighbouring parallel rows by a narrow passage, in some cases not wide enough to admit a horse and cart. The sanitary conveniences consisted of huge blocks of privies, which were placed either between two adjacent dwellings or were isolated by a narrow cross passage. With the exception of one house, it is years since any new property was erected in this area, and 109 houses have been either voluntarily closed or have been closed by the Council during the last 18 years. At the present time the special sanitary problems in this area are those due to lack of ventilation, lighting and difficulty of adequate cleansing, as the state of

the buildings, necessity for repairs, yard surface and drainage, etc., are equal to property having a similar rental in other parts of the town.

The type of houses in this area may be described as a single house, having only one entrance and without cross or through ventilation. They contain a living room with a small scullery at the back or at the side in which the stairs are often fixed, and have a large and small bedroom. The space under the stairs usually does duty as a pantry. Powers under the Corporation Act have been obtained for the compulsory provision of properly lighted and ventilated places for food storage in all new houses.

An undesirable feature in the older parts of the town is the tunnel entrances to courts (as seen in St. Mary's Gate). The opening of the court is made at the expense of the living room of the house or houses forming the entrance, the covering being formed by the floor of the bedroom. The arrangement very materially affects the free air space and ventilation of the houses in the courts.

Further, small dwelling-houses having a frontage in a street that has become a shopping street are converted into lock-up shops in the front, the backs of the houses being let off as separate dwellings. In some cases there is practically no space at the back, and through ventilation has been destroyed by bricking up the old communications from the front to the back of the house.

I should also call attention to the demoralizing effect of the common yard. Apart from some of the oldest houses in the Borough where there is no yard at all other than the narrow court which forms the approach there is a large class of property in which the accommodation at the back consists of a narrow paved footway and an unpaved area common to all the houses in the row. This space is a "No Man's Land" belonging to no occupier in particular; there is no care

taken that it shall be kept in a clean condition, and on a nuisance arising every occupier denies authorship. There is no privacy and the lack of incentive to cleanliness and tidiness outside makes its effects felt inside the house. A smaller yard belonging to two houses only which is properly asphalted is infinitely preferable to the large unpaved common yards which are degrading some of our housing to-day.

Another point to which attention should be directed is those yards giving access to works upon which dwelling-houses open. In some cases these yards are properly paved; in some, however, where there are several owners, liability is denied and the means of access to the houses become quagmires.

Houses Empty June 30th, 1914.

RENTS				North Ward.	South Ward.	Central Ward.	West Ward.	TOTAL.
3/3 per week (Rates inclusive)	..	..	..	..	..	..	1	1
4/-	..	..	..	..	..	1	..	1
4/6	..	..	..	1	1	..	..	2
4/9	..	..	..	..	..	..	2	2
5/3	..	..	..	..	2	..	..	2
10/-	..	..	..	2	..	..	..	2
£ s. d.								
15 0 0 per year and Rates	..	..	1	..	..	..	..	1
16 0 0	..	..	1	..	..	..	..	1
18 10 0	..	..	1	..	..	..	..	1
20 0 0	..	..	2	..	..	..	..	2
22 0 0	..	..	1	..	..	..	..	1
25 0 0	..	..	..	..	..	..	2	2
28 0 0	..	3	1	..	..	..	..	4
30 0 0	..	2	..	..	..	..	..	2
35 0 0	..	1	1	..	..	..	..	2
				9	8	4	5	26

The following tables summarise the House to House Inspections under the Housing and Town Planning Act:—

SOUTH WARD.

Number of houses inspected	STREET.	Back to Back.	Through houses.	Single houses having through vent.	Single houses having no through vent.	Number of Defects Found.	Number of W.C's.	Number of houses using Privies.
10	Alma Street ..	0	9	1	0	5	0	10
13	Calow Lane ..	0	13	0	0	7	2	11
42	Derby Road ..	0	42	0	0	17	6	36
15	Park Street ..	0	15	0	0	14	0	15
19	Warwick Street ..	0	19	0	0	21	0	19
16	York Street ..	0	16	0	0	4	0	16
17	Mansfield Road ..	0	17	0	0	6	0	17
132		0	131	1	0	74	8	124

CENTRAL WARD.

Number of houses inspected	STREET.	Back to Back.	Through houses.	Single houses having through vent.	Single houses having no through vent.	Number of Defects Found.	Number of W.C's.	Number of houses using Privies.
14	Beetwell Street ..	0	10	2	2	14	0	14
13	Boythorpe Road ..	0	12	1	0	7	8	5
14	Hipper Street ..	6	8	0	0	9	0	14
12	Hollis Lane ..	0	12	0	0	7	2	10
14	Knifesmithgate ..	0	10	3	1	5	9	5
26	Low Pavement ..	0	15	10	1	11	18	8
8	Park Road ..	0	6	0	2	0	6	2
18	Saltergate ..	0	4	14	0	15	18	0
3	Spa Lane ..	0	3	—	0	3	0	3
15	St. Mary's Gate ..	14	1	0	0	0	15	0
8	Vicar Lane ..	0	8	0	0	3	8	0
5	Wheatbridge Road	0	2	1	2	2	5	0
30	Wheeldon Lane ..	0	21	3	6	12	10	20
180		20	112	34	14	88	99	81

NORTH WARD.

Number of houses inspected	STREET.	Back to Back.	Through houses.	Single houses having through vent.	Single houses having no through vent.	Number of Defects Found.	Number of W.C's.	Number of houses using Privies.
27	Canal Wharf ..	0	15	10	2	3	6	21
25	Devonshire Street	0	25	—	—	7	25	0
5	Holywell Street ..	0	5	0	0	2	5	0
7	Marsden Street ..	0	7	0	0	4	7	0
20	Newbold Road ..	0	14	6	0	10	20	0
53	Prospect Street ..	0	53	0	0	31	53	0
8	Saltergate ..	0	8	0	0	4	8	0
28	Spencer Street ..	2	26	0	0	9	28	0
17	Stonegravels ..	0	17	0	0	8	13	4
9	St. Helen's Street	0	9	0	0	3	0	9
39	Victoria Street ..	0	39	0	0	7	2	37
12	Sheffield Road ..	0	12	0	0	5	8	4
250		2	230	16	2	93	175	75

WEST WARD.

Number of houses inspected	STREET.	Back to Back.	Through houses.	Single houses having through vent.	Single houses having no through vent.	Number of Defects Found.	Number of W.C's.	Number of houses using Privies.
25	Chester Street ..	0	25	0	0	27	3	22
13	Barker Lane ..	0	13	0	0	9	0	13
43	Chatsworth Road	0	31	12	0	35	15	28
19	Cross Street ..	0	19	0	0	7	6	13
16	Old Road ..	0	12	4	0	8	0	16
14	Old Hall Road ..	0	11	2	1	10	0	14
11	Hipper Street ..	0	11	0	0	3	0	11
141		0	122	18	1	99	24	117

The following houses were certified as fit for occupation during the 12 months ending June 30th, 1914:—

North.	South.	Central.	West.
11 ...	53 ...	9 ...	54

Total since Census 1911:—

North.	South.	Central.	West.
50 ...	184 ...	66 ...	221

Closed by action of Council, or voluntarily during 12 months ending June 30th, 1914:—

North.	South.	Central.	West.
0 ...	0 ...	33 ...	1

Total since Census 1911:—.

North.	South.	Central.	West.
8 ...	5 ...	62 ...	5

There were at the Census 7,609 occupied houses, and 235 unoccupied. There were 8,259 occupied houses, and 26 empty houses on June 30th, 1914.

Of the 703 houses inspected during the year, 241 were repaired after informal notice, and without reporting their condition to the Health Committee. The defects consisted mostly of leaking roofs and bad floors resulting from ordinary wear and tear.

Representations were made to the Council that the owners of ten houses refused, after informal notice, to do the necessary work. Notices under the Housing and Town Planning Act were then served upon them to place the houses in a condition fit for human habitation. Of the ten houses, 7 were afterwards repaired by the owners, two were

demolished without further legal formality, and one after a Demolition Order had been served. Five houses closed in 1913 were also demolished, and five are outstanding.

In addition to these, 2 houses have been demolished voluntarily, and 10 for street improvements.

HOUSE DEMOLITION TO DECEMBER 31st, 1914.

	Demolition.		Demolished without further legal formalities after receipt of notice to repair.		Demolished for Public Street Improve-ments.		Demolished for Private Improve-ments.		Demolition Order outstanding.	
	...	Order.	...		...		...		...
1911	...	4	...	2	...	24	...	0	...	0
1912	...	5	...	0	...	2	...	0	...	0
1913	...	12	...	0	...	20	...	5	...	11
1914	...	1	...	7	...	10	...	2	...	5
		—		—		—		—		—
Totals	...	22		9		56		7		16
		—		—		—		—		—

WARD DISTRIBUTION OF DEMOLISHED HOUSES.

		North.		South.		West.		Central.
1911	...	4	...	2	...	0	...	24
1912	...	0	...	0	...	0	...	7
1913	...	4	...	5	...	3	...	25
1914	...	1	...	1	...	2	...	16
	—		—		—		—	
Totals...		9	...	8	...	5	...	72
	—		—		—		—	

OUTSTANDING DEMOLITION ORDERS.

		North.		South.		West.		Central.
1913	...	0	...	0	...	0	...	11
1914	...	0	...	0	...	1	...	4

SANITARY CONVENIENCES.—The following table shows approximately the number and types of sanitary conveniences in each Ward:—

Ward.	Privies.	Middens.	Dry Ashpits	Portable Dustbins.	Closet Pails.	Water Closets.	Waste Water Closets.
NORTH ...	593	333	195	772	2	1053	37
SOUTH ...	1416	746	131	319	13	532	16
WEST ...	1081	619	67	1056	17	987	169
CENTRAL ...	459	239	155	817	2	1024	67
Total ...	3549	1937	548	2964	34	3596	289

Annual Report of the Medical Officer of Health for the Year 1914 for the Borough of Chesterfield on the Administration of the Factory and Workshop Act, 1901, in connection with Factories, Workshops, Workplaces, and Homework.

I.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of	
	Inspec- tions.	Written Notices.
Factories (including Factory Laundries)	87	8
Workshops (including Workshop Laundries)	328	32
Workplaces (other than Outworkers)	82	27
Total	497	67

2.—DEFECTS FOUND.

Particulars.	Number of Defects	
	Found.	Remedied.
<i>Nuisances under the Public Health Acts :</i>		
Want of Cleanliness	23	23
Want of Ventilation	1	1
Overcrowding ... ..	...	...
Want of Drainage of Floors ... ..	...	...
Other Nuisances	23	23
Sanitary Accommodation } insufficient ... ..	...	...
} unsuitable or defective... ..	19	19
} not separate for sexes	1	1
<i>Offences under the Public Healths Acts :—</i>		
Illegal occupation of underground bakehouse (s. 101)... ..	...	...
Breach of special sanitary requirements for bake-houses (ss. 97 to 100) ... ..	..	...
Other Offences (excluding offences relating to outwork which are included in part 3 of this Report) ... ..	...	...
Total	67	67

3.—HOMEWORK.

Outworkers' Lists, Section 107.													
Nature of Work.	Lists received from Employers.				Addresses of Outworks.						Inspection of Outworkers.		
	Twice in the year.		Once in the year.		Received from other Councils.		Forwarded to other Councils.		Workmen.	Workmen.			
	Lists.	Outworkers.		Lists.	Outworkers.		Con-tractors.	Workmen.				Con-tractors.	Workmen.
		Con-tractors.	Workmen.		Con-tractors.	Workmen.							
Wearing Apparel making, &c. ..	8	8	20	2	2	2	4	8	...	...	25
Lace lace curtains and nets ...	4	4	146	1	1	1	1	1	7	65	27		
Total ...	12	12	176	3	3	3	5	9	7	65	52		

36

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.		Number.
Bakehouses	...	27
Dressmakers	...	21
Milliners	...	14
Joiners, Cabinet Makers and Wood Workers	...	20
Tailors ...	...	18
Saddlers	...	5
Sugar Boilers	...	4
Smiths (tin and iron)	...	13
Boots and Clogs...	...	21
Plumbers	...	8
Other Trades	...	31
Total number of Workshops on Register		182

C.—SANITARY ADMINISTRATION OF THE DISTRICT.

HOSPITAL ACCOMMODATION.—Penmore Isolation and the Smallpox Hospital are the property of the Chesterfield Joint Hospital Committee, which consists of representatives of the Brampton and Walton, the Newbold and Whittington Urban District Councils, and the Corporation of Chesterfield.

The accommodation at Penmore consists of—

(1) Scarlet fever block. Two wards, measurements 48ft. 4ins. by 26ft. by 13ft., and 36ft. 3ins. by 26ft. by 13ft.; cubical capacity 16,325, and 12,252 cubic feet, Beds 14, with two small observation wards of one bed each.

(2) Enteric block. Two wards, measurements 33ft. 8ins. by 26ft. by 13ft., and 24ft. by 26ft. by 13ft.; cubical capacity 11,356, and 8,112 cubic feet. Beds 10.

(3) Isolation block. Three Wards, measurements 13ft. by 16ft. by 26ft., and 13ft. by 13ft. by 17ft., and 13ft. by 13ft. by 17ft.; cubical capacity 5,408, 2,873, and 2,873 cubic feet. Beds 5.

There are also an administrative block, steam laundry, disinfecting block with steam disinfecter, discharge room, ambulance and bedding van, sheds, stable, and mortuary. The hospital and grounds occupy about three acres of land, and there are nine acres in reserve for possible extension.

Population served: The hospital supplies the needs of the Borough of Chesterfield, population at 1911 census 37,406; the Whittington and Newbold Urban District, 1911 census 17,284; and the Brampton and Walton Urban District, census population 2,124; total, 56,814. When Penmore was first opened in January, 1905, the estimated population of the combined districts was 47,560.

Other accommodation: By arrangement with the North Derbyshire Hospital District, cases of infectious disease requiring isolation may, when accommodation for them is not available in the hospital serving the District to which they belong, be mutually transferred.

There is also the Newbold Smallpox Hospital, transferred in 1912 to Spital Smallpox Hospital site.

The Chesterfield and North Derbyshire Hospital and the Union Infirmary are also prepared to take in cases of enteric fever; in the latter case, Poor Law patients are only admitted.

Diseases concurrently treated: During the greater part of last year all three blocks have been used for isolation of scarlet fever and diphtheria. Under a scheme submitted by the County Council a 14 bedded pavilion for the reception of advanced cases of pulmonary tuberculosis has been erected, and was opened on January 1st, 1915.

Infected articles are removed, disinfected and returned free of charge on application being received from the sanitary officials of the constituent authorities.

Newbold Hospital, now removed to the Spital Small-pox Hospital site, provides accommodation for 22 patients in two wards, one of which is fitted with red glass windows. It has a small administration block, providing accommodation for the caretakers and one nurse, and a washhouse and mortuary. It has a water supply from the mains of the Chesterfield Gas and Water Board, and a small sewage disposal works on the bacterial purification system.

Disinfection of infected articles is done at Penmore Hospital.

The charge to constituent authorities, i.e.—Chesterfield Borough, Whittington and Newbold Urban District and the Brampton and Walton Urban District, for the maintenance of patients in the Hospital is $1/3$ per diem. For cases belonging

to the North Derbyshire Hospital District 2/- per diem, for cases from the Union Workhouse 3/- per diem, and for cases from other districts 30/- per week.

Owing to the epidemic of scarlet fever which has prevailed over the whole neighbourhood during the last quarter of the year it became impossible to find sufficient isolation at Penmore Hospital for all cases requiring removal. The Spital Smallpox Hospital which was opened in October, 1913, for the reception of convalescent cases of scarlet fever was closed on July 29th, 1914. The pressure on the accommodation will be very materially eased by the erection of an additional block about to be undertaken by the Committee. Important alterations in the administration block will be made at the same time.

WORK AT PENMORE HOSPITAL, 1914.—The staff consists of a Non-resident Medical Officer, Matron, three Charge Nurses, one Assistant Nurse, and two Probationers; there are also a cook, a housemaid, two wardmaids, and a Non-resident Porter and Laundress.

The total number of cases of scarlet fever and diphtheria admitted is the highest since the hospital was opened. The following table shews the number of cases treated since the Hospital was opened (Dec. 1904).

Year.	Scarlet Fever.	Diphtheria.	Enteric.
1905	46	4	5
1906	34	3	12
1907	26	1	5
1908	40	2	14
1909	164	...	5
1910	85	...	8
1911	105	10	16
1912	187	...	...
1913	157	60	...
1914	168	71	...

The authorities responsible for the cases are as follows : --

<u>Constituent Authorities.</u>	Scarlet Fever.	Diphtheria
Borough	133	56
Whittington & Newbold U. D.	30	10
Brampton & Walton Urban Dis.	...	1
<u>Other Authorities</u>		
Chesterfield Rural District	3	4
Blackwell Rural District	1	...
Sutton-in-Ashfield Urban District	1	...
	<hr/>	<hr/>
	Total 168	71

The cases of scarlet fever admitted were of the same mild type which characterised the epidemic of last year; there were five deaths; one child, admitted from outside the Borough for scarlet fever, was found to have measles and died therefrom.

The cases of diphtheria were of all types. There were seven laryngeal cases requiring tracheotomy: of whom one died.

In estimating the value of Hospital isolation for scarlet fever we must place to the credit of the system the economic gain in relieving the household of the necessity of the breadwinner staying away from his or her work, of the extra work and strain thrown upon the housewife of nursing the patient while attending her normal duties and of unduly diminishing the sleeping accommodation of the remaining members of the family.

Further, there is the advantage of placing the patient under the best conditions as regards medical attendance and nursing, and as regards the other children in the house, the educational saving in their continued attendance at school.

As regards the influence of Hospital isolation on the number of cases occurring, the following points are of interest.

It should be borne in mind that the 133 cases admitted to Penmore were selected from among the 196 notified on the

ground that isolation could not be found at home; that is to say the 63 cases isolated at home occurred in larger houses where the proportion of persons per bedroom was smaller than in the 133 cases removed to hospital. If all cases had been isolated at home a smaller proportionate number of secondary and "return" cases would have occurred in the 63 cases which actually were isolated at home as they had the advantage in superior accommodation.

The figures given bring out this point.

	Average No. of Bedrooms.	Average No. of Persons per House.	Average No. of Persons per Bedroom.
Home Cases ...	2.77	4.8	1.71
Hospital Cases ...	2.57	5.9	2.29

The Hospital Return cases, that is cases infected by patients discharged from Penmore numbered 10, or 7.5 per cent. There were no Home return cases, that is cases infected after the completion of the isolation period. Probably the large number of cases taken into Hospital and the fact that the Spital Smallpox Hospital now condemned by the Local Government Board as unsuitable for the purpose, was used for isolating convalescent cases during the period January to July, had a considerable bearing on the large number of Hospital return cases.

Secondary Hospital cases, that is cases arising shortly after the removal of the first case and infected by it numbered 15, or 11.2 per cent. of cases admitted.

Secondary Home cases, that is cases arising after the isolation of the first case and infected by it, numbered 9, or 14.2 per cent. of cases isolated at home. It follows that if earlier notification and removal were secured the advantage of Hospital isolation would be emphasised.

BACTERIOLOGICAL EXAMINATION.

DIPHTHERIA.—The Borough is fortunate in having at its service the Laboratory maintained at Derby by the County Council. Dr. Barwise has on several occasions remarked that sufficient use of the aid afforded by a Bacteriological Examination is not made.

Thus in 1912 there were 44 cases of diphtheria and 16 swabbings from the throat sent for examination. In 1911, 77 cases and 41 swabs; and in 1910, 47 cases and 66 swabs. During the last two years, with the co-operation of the Medical Practitioners of the town swabs were taken in a more systematic manner. They are tabulated below:—

	Penmore Hospital.				Medical Practitioners		Medical Officer of Health.		Totals.		
	Diagnosis.		Discharge.								
	Positive	Neg'tive	Positive	Neg'tive	Positive	Neg'tive	Positive	Neg'tive	Positive	Neg'tive	Grand Total
1913	83	54	16	111	63	18	40	340	152	523	675
1914	34	94	37	222	61	5	108	652	240	973	1213

The swabs taken by the Medical Officer of Health last year comprise 193 from children in schools suffering from sore throats, of which 49 were positive; 310 from children in schools who were school contacts of actual cases, 30 proving to be positive, and 257 were taken of cases and home contacts to ascertain if the household was free of infection; of these 29 showed the presence of the diphtheria bacillus.

ENTERIC FEVER.—No specimens of blood were sent during the year.

SPUTUM EXAMINATION.—Seventeen specimens were sent for the purpose of ascertaining whether the patient was suffering from pulmonary tuberculosis. Seventeen were positive.

MILK EXAMINATION.—Thirteen samples of milk were sent for examination in respect of the presence of tubercle bacillus. They were all reported as negative.

D.—PREVALENCE OF AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

TABLE II.—Cases of Infectious Diseases notified during the year 1914.

NOTIFIABLE DISEASE.	Number of Cases notified.							Total cases notified in each Locality.					Total Cases Removed to Hospital.	
	At all ages.	At Ages—Years.						North Ward.	South Ward.	Central Ward.	West Ward.	Institutions.		
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.							65 and upwards.
Small-pox	..	..	24	102	17	8	2	..	33	34	43	45	..	..
Cholera, Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous croup)	155	2	..	2	3	10	12	5	7	6	10	4	6	56
Erysipelas	33	1	..	139	10	6	..	1	48	57	55	32	4	..
Scarlet fever	196	1	39	..	..	..	..	..	..	..	..	..	..	133
Typhus fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing fever, Continued fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever	..	..	..	..	1	4	..	..	..	3	..	2	..	..
Cerebro-spinal Meningitis..	5	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	73	5	2	22	16	23	7	3	20	13	23	17	1	..
Other forms of Tuberculosis	55	4	5	32	9	4	1	..	26	15	8	6	..	..
TOTALS	522	13	70	297	56	55	22	9	135	129	141	106	11	189

ISOLATION HOSPITALS :—Penmore Hospital, Chesterfield ; Small-Pox Hospital, Spital, Chesterfield.

The number of cases of infectious diseases notified was 522, compared with 427 for the year 1913.

The deaths were 70 inclusive of 56 from tuberculosis. The number of deaths from the non-notifiable infectious diseases, i.e., measles, whooping cough, influenza, diarrhoea, and respiratory diseases, was 134.

SMALLPOX.—No case occurred for the ninth year in succession.

During the year smallpox has been imported into nearly all the large seaports of the Kingdom, but has not often made its way inland. There has been no large outbreak in the country. The danger to be apprehended is from persons of the vagrant class and habitués of common lodging-houses who, on the occurrence of a case in their immediate neighbourhood, instantly change their quarters in the hope of avoiding any irksome restrictions, and may already be infected. With this principle in view on the occurrence of a case within "tramping" distance of Chesterfield, a copy of the following letter has been sent to the Chief Constable, the Master of the Workhouse, and the keepers of the eleven common lodging-houses in the Borough:

Dear Sir,

I beg to inform you that smallpox has occurred at, and should be much obliged if you could let me know the names of persons from that district applying for lodgings in your house.

It would be advisable in future, in any case of suspicious illness among your lodgers, to let me know as soon as possible in order that the matter may be investigated.

I am,

Yours truly.

The vaccination returns for the various parts of the country continue to show a decrease in the number of persons successfully vaccinated. At present, by great efforts on the part of the Port Sanitary Authorities, the spread of the disease has been prevented. Year by year the cordon of vaccinated persons around any case of smallpox becomes less and less effective as a protection against the further spread, and those of us who think the danger small may find a rude awakening in the near future. The Royal Commission, after seven years' deliberation, reported unanimously in favour of vaccination. While it is true that the State provides vaccination, it does not do its duty, in that exemption may be obtained by a simple declaration. The simplest and cheapest method of avoiding an epidemic of smallpox is the thorough vaccination and re-vaccination of the whole population. Our smallpox hospitals could then fulfil some more useful function than that of lying idle for years in expectation of an epidemic which when it arrives they may be totally incapable of dealing with.

ERYSIPELAS.—There were notified 33 cases of erysipelas; and 2 deaths.

SCARLET FEVER.—196 cases were notified, as compared with 70 in 1913, and 188 in 1912, and a decennial average of 149. They composed 106 females and 90 males. 192 houses were infected.

The age distribution was as follows :

		1-2	2-5	5-10	10-15	15-20	20-25	25-30	30-35	Over 35	Ttl.
Male	... ..	2	14	41	25	3	3	—	2	—	90
Female	... ..	4	22	54	17	4	1	1	2	1	106

The Ward distribution was as follows :—

WARDS.

		North.	South.	Central.	West.	Children's Homes.	The Work-house.
Cases	... ..	48	57	55	32	3	1

As regards the class of house, 188 were through houses, 6 were single houses, 4 had no through ventilation, and 2 were back-to-back houses. Of the cases notified, 5 occurred in three-roomed houses, 56 in four-roomed, 53 in five-roomed, and 64 in six-roomed houses, and 18 in larger houses. The sanitary accommodation was privy middens in 89 cases, water closets in 104 cases, and waste water closets in 3 cases.

The probable source of infection was as follows:—

Infected by case discharged from Penmore Hospital ...	10
Direct contact with previous case in house	9
Contact with school case	18
Indirect contact, i.e., with person who has been in contact but does not himself contract disease	2
Primary Cases	162

133 cases were removed to Penmore Hospital. There were seven deaths, of which six took place in Penmore Hospital.

The number of cases was 31 per cent. above the decennial average of 149. The case mortality was 3.5 per cent., as compared with a decennial average of 3.0 per cent.

DIPHTHERIA.—The year 1914 was marked by a continuance of the severe outbreak of diphtheria recorded in 1913, there being more cases notified than in any previous year for which records are available. The number of cases were three times the decennial average number, while the number of deaths was a little under the average. The case mortality was at the rate of 3.2 per cent. as compared with 3 per cent. 1913, 6.8 per cent. 1912, 13 per cent. 1911, and 6.2 per cent. in 1910.

In the report for 1913 it was pointed out that the epidemic began in the West Ward; since that time the infection has been more uniformly spread, each Ward suffering alike.

The seasonal influence is shown in the table on page One third of the cases occurred in January and February.

Diphtheria is peculiarly a disease of direct contact, the influence of school attendance being very marked. Thus out of a total of 97 cases attending Public Elementary Schools 31 were scholars at the Central Schools and 11 at Brampton, while only Derby Road Boys was entirely free from the disease.

The number of cases notified is larger than would have been the case, but for the extensive use made of Bacteriological aids to diagnosis. There were five deaths, one of which took place in the Penmore Hospital. I attribute the low mortality to the extensive use of antitoxin, the prompt isolation at Penmore of severe cases, and early diagnosis. There is no doubt that no case of diphtheria should die of that disease provided antitoxin treatment is given early enough. The procedure in a case of diphtheria is as follows:—

(1) SCHOOL CASE.—The school is visited and the children who sat next to the child notified are inspected and swabs taken of their throats, on an average eight such children are examined. 310 children were examined of which 30 showed the presence of the diphtheria bacillus. Those who are carriers, i.e., children who have no symptoms but who have positive swabs are excluded from school and seen again each week until a negative swab is obtained. The schoolroom is disinfected by spraying walls, floors, desks, writing boards, pencils and blackboards, with 1 in 100 formalin solution.

(2) SCHOOL CASES AND OTHERS.—(a) Case removed to hospital. All the other children at home are swabbed and excluded for a period of 14 days. If any one of them prove to be a carrier, all are excluded until a negative swab is obtained. The room occupied by the

patient is disinfected by formalin vapour. The patient is not discharged from Penmore until two successive negative swabs are obtained from the throat and nose.

(b) Case isolated at home. When the request for disinfection is received from the Medical Practitioner in charge of the case, the throats of the other children in the house are swabbed as above, generally the swab from the patient is taken by the Medical Attendant. In this case the disinfection includes removal of bedding to the steam disinfector at Penmore. In future with the additional staff at Penmore it will be possible to steam disinfect bulky articles in every case of infectious disease whether isolated at Penmore or at home.

Houses infected 153, cases 155, deaths 5.

Four of the deaths occurred at home, and one in Penmore.

The age distribution of the cases is as follows:—

	1-2	2-5	5-10	10-15	15-20	20-25	25-30	30-35	Over 35	Ttl.
Male	3	12	30	11	2	3	0	1	1	63
Female	1	11	42	18	8	4	1	4	3	92

The ward distribution is as follows:—

North Ward.	South Ward.	Central Ward.	West Ward.
33	34	43	45

As regards the class of house, 146 were through houses, 3 were single houses, 7 had no through ventilation, and 3 were back-to-back.

Of the cases notified one occurred in a van, 3 in three-roomed houses, 30 in four-roomed, 59 in five-roomed, 48 in six-roomed houses, and 16 in larger houses.

The probable source of infection was as follows:—

Direct contact with previous case in house	22
Contact with School cases	26
Indirect contact	9
Primary	98

Privy middens were the sanitary accommodation in 78 cases, W.C.'s in 71 cases, and Waste Water Closets in 6. In 18 per cent. of the cases a recent visit to a place of amusement, chiefly picture palaces, had taken place within the probable incubation period of the disease.

Monthly Incidence of Scarlet Fever and Diphtheria.

1914.	Scarlet Fever.	Diphtheria.
January	19	30
February... ..	17	25
March	17	17
April... ..	15	11
May	18	18
June	16	8
July	18	9
August	6	7
September	8	6
October	30	3
November	23	12
December	9	9
	—	—
Total ...	196	155
	—	—

The schools attended by diphtheria and scarlet fever cases were as follows:—

School.	Average Attendance.		Scarlet Fever Cases.	Diphtheria Cases.		
Derby Rd. (Girls)	229	...	11	...	2	
Vicar Lane	256	...	6	...	7	
Old Road... ..	369	...	7	...	3	
Derby Rd. (Boys)	173	...	4	...	—	
St. Thomas	291	...	3	...	4	
Trinity	263	...	6	...	2	
Hasland C. of E.	343	...	6	...	6	
Christ Church	157	...	—	...	1	
Central	870	...	29	...	31	
Hasland (Eyre St.) ...	236	...	7	...	7	
St. Helen's	643	...	11	...	7	
Hipper Street	590	...	13	...	6	
Brampton	988	...	10	...	11	
St. Mary's	298	...	13	...	5	
Spital	50	...	4	...	2	
Grammar School	—	...	—	...	1	
Girls' High School ...	—	...	—	...	1	
Private Schools	—	...	—	...	—	
Cases not attending School but having other members of house attending	}		...	50	...	31
Cases in which there are no children from house of school age	}		...	16	...	28
Total ...			196	...	155	

TABLE.

Showing the Number of Cases of and Deaths from Infectious Diseases during recent years.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	Decennial Average	1914
Notifiable Diseases.												
SMALLPOX :												
Cases ...	6	53	...	...	...	...	...	...	...	...	5.9	...
Deaths ...	...	1	...	...	...	...	...	...	...	...	0.1	...
DIPHTHERIA & MEM- BRANOUS CROUP												
Cases ...	37	19	19	17	39	115	47	77	44	132	54.6	155
Deaths ...	10	3	2	..	11	10	3	10	2	4	5.5	5
ERYSIPELAS :												
Cases ...	32	34	39	40	42	21	28	46	23	25	33.0	33
Deaths ...	..	...	1	1	1	...	2	2	2	...	0.9	2
SCARLET FEVER :												
Cases ...	291	116	63	53	68	272	104	97	188	70	149.5	196
Deaths ...	11	8	2	2	2	1	5	4	8	2	4.5	7
ENTERIC FEVER :												
Cases ...	46	15	17	8	23	10	10	8	3	2	14.0	...
Deaths ...	10	4	5	3	5	1	1	1	1	2	3.3	...
PULMONARY TUBERCULOSIS		Not Notifiable				28	51	52	122	112	...	73
	30	29	31	30	35	47	25	44	41	42	36.4	42
OTHER TUBERCU- LAR DISEASES												
Cases ...	...	Not Notifiable								82	..	55
Deaths ...	20	15	23	10	30	29	15	16	15	23	19.6	14
PUERPERAL FEVER :												
Cases ...	...	2	3	2	2	6	3	4	1	3	2.7	5
Deaths ...	...	...	1	...	...	...	1	...	...	2	0.4	3
CEREBRO SPINAL FEVER & ACUTE POLIOMYELITIS		Not Notifiable								2	...	...

OPHTHALMIA NEONATORUM		Not Notifiable								...	...	5

Non-Notifiable Diseases.												
DEATHS ONLY :												
DIARRHŒA AND ENTERITIS	72	26	44	27	41	27	56	86	14	47	43.1	16
MEASLES ...	2	7	4	9	7	9	8	36	2	29	14.1	4
WHOOPIING COUGH ...	7	6	8	10	9	2	6	5	12	1	6.5	12
RESPIRATORY DISEASES	66	84	66	89	107	83	70	88	85	105	84.3	95

ENTERIC FEVER.—This disease continues to show a steady abatement. The experience in Chesterfield is the same as in all parts of the country; that is, that the prevalence of enteric fever is more susceptible to sanitary improvements than any other disease; there were no cases notified.

PUERPERAL FEVER.—There were five cases notified and three deaths. The cases were duly reported by the Health Visitor to the County Medical Officer of Health (the officer of the Local Supervising Authority) and the appropriate action taken viz., suspension of the midwife until her effects were disinfected, and disinfection of the bedding, and room of the patient.

MEASLES.—Measles is not a notifiable disease, but by arrangement with the School Attendance Officers and Teachers, notification is made to me of all infectious and contagious diseases coming to their knowledge. 61 cases were thus notified. This does not, of course, represent all cases. There has been very little measles during the year. There being four deaths only as against twenty-nine last year, two in 1912, 36 in 1911, and a decennial average of 14.1. One of the deaths was that of an infant under one year. One was that of a child of one and under two years of age. Two were those of children of 2 and under 5. From the enquiries made by the Health Visitor it seems that no precautions against spreading the disease had been adopted by the parents. Instructions both verbal and by leaflets were given as to treatment of those infected and as to precautions to be taken in the 61 cases visited. School closure was resorted to in the case of the Infant Departments of the St. Mary's School (Dec. 7th to end of winter term).

DIARRHŒA, ENTERITIS AND GASTRITIS.—There were 16 deaths from this disease during the year, 15 under the age of 1 year, and 1 under the age of 2 years.

13 were males, and 3 females. The ward distribution is as follows:—

Central	...	...	...	0
North	...	...	...	2
South	...	...	...	7
West	...	...	...	7

METHODS OF FEEDING.—Of the 13 Infants of 7 months and under 2 were entirely breast fed, 1 partly breast fed and partly bottle fed, and 10 entirely bottle fed.

SEASON.—The deaths occurred in months of June (2), July (2), August (4), September (7), October (1).

4 out of the 6 deaths occurred in houses having water closets, and 12 in houses having privy middens.

E.—PREVALENCE AND CONTROL OVER TUBERCULOSIS.

Deaths from Tuberculous Diseases.

Year.	Phthisis. Pulmonalis.		Other Tuberculosis Diseases.		Totals
	Males.	Females.	Males.	Females.	
1901	27	23		19	69
1902	18	11		20	49
1903	19	9		19	47
1904	18	12		20	50
1905	13	16		15	44
1906	15	16		23	54
1907	14	16		10	40
1908	20	15		30	65
1909	24	23		29	76
1910	15	10		15	40
1911	23	21		16	60
1912	18	23		15	56
1913	26	16	15	12	69
1914	20	22	7	7	56
Totals	270	233		272	775

The means of control of Tuberculosis in the Borough comprise:

- (1) 100 bed Sanatorium at Walton just outside the Borough.
- (2) A fourteen bed pavilion for advanced cases at the Penmore Isolation Hospital.
- (3) A Tuberculosis Dispensary.

These institutions are the property of the County Council and administered by their Medical Officer.

The Tuberculosis Nurse is also employed by the County Council, co-operation being obtained by periodical reports on overcrowding and sanitary defects.

In addition to the work in general carried out by the County Medical Officer (which is reported on by him) 172 visits were paid to houses occupied by Tuberculous patients by the Borough Sanitary Staff in connection with defects reported to the Health Department. Fifty-three houses were disinfected after removal or death of Tuberculous patients.

The number of cases notified during the year is as follows:—

TUBERCULOSIS.—Cases notified in 1914. Forms A and B.

LOCALIZATION OF DISEASE.		Age 0-1	Age 1-5	Age 5-15	Age 15-25	Age 25-45	Age 45-65	65 and over	Total.
		...	2	22	16	23	7	3	73
PULMONARY	...	...	...	...	...	1	...	...	1
OTHER FORMS:—	...	...	...	...	...	...	...	...	1
Testicle	...	...	...	1	...	...	...	...	1
Eye...	...	...	2	3	...	...	...	...	7
Bowels	...	...	...	...	...	...	...	...	...
SKIN—	...	...	...	...	...	...	...	...	...
Lupus	...	...	1	1	...	...	...	...	2
MEMBRANES—	...	...	...	...	...	...	...	...	...
Cerebral Meninges	...	1	1	1	...	...	...	...	3
BONES—	...	...	...	...	...	...	...	...	...
Spine	...	...	1	3	...	...	...	...	4
Innominate	...	...	...	1	...	...	...	...	1
Radius	...	...	...	1	...	...	...	...	1
Ulna	...	...	...	1	...	...	...	...	1
Leg...	...	1	...	...	...	...	...	...	1
Metatarsals...	...	...	...	...	1	...	...	...	1
JOINTS—	...	...	...	...	...	...	...	...	...
Hip...	...	...	...	1	2	1	...	...	4
Knee	...	...	...	1	1	...	...	...	2
Ankle	...	...	...	2	1	...	...	...	3
GLANDS—	...	...	...	...	...	...	...	...	...
Cervical	...	...	...	16	4	2	...	...	22
Inguinal	...	...	...	...	...	...	1	...	1
TOTALS	...	4	7	54	25	27	8	3	128

The number of cases receiving Institutional treatment is seen in the summary of Form C. (Register of Notification by Medical Officers of Poor Law Institutions and Sanatoria of Patients who have been previously notified before Admission).

The number of cases receiving Institutional treatment is seen in the summary of Form C. (Register of Notification by Medical Officers of Poor Law Institutions and Sanatoria of Patients who have been previously notified before Admission).

Name		5 and under 15	15 and under 25	25 and under 45	45 and under 65	Total
Lungs	—	7	17	17	3	44
Knee Joint	—	3	—	—	—	3
Testicle	—	—	1	—	—	1
Glands of Neck		1	1	2	—	4
Total	... —	11	19	19	3	52

The number of persons discharged from such institutions is seen in summary of Form D.

TABLE.

		5 and under	15 and under 25	25 and under 45	45 and under 65	Total
Lungs	...	1	2	13	1	17

DEATH RATE.—The number of deaths registered as occurring in the Borough was 679, equal to a Crude Death Rate of 16.7 per 1,000 living, as compared with an average rate of 18.60 in the previous ten years, and 18.9 for 1913.

118 occurred in the Chesterfield and North Derbyshire Hospital, 120 in the Union Workhouse, and 7 in Penmore Hospital.

158 deaths occurred of persons not belonging to the Borough. Of these 85 died in the Hospital, 68 in the Workhouse, and one each in Penmore Hospital, the North Ward, the Central Ward, the Cemetery, the Canal and the Market Place Station.

TABLE III.

Causes of, and ages at, death during the Year 1914.

Causes of Death.		Nett Deaths at the subjoined ages of 'Residents' whether occurring within or without the District.									Total Deaths whether of 'Residents' or 'Non-Residents' in Institutions in the District.
		All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	26 and under 45 years.	45 and under 65 years.	65 and upwards.	
All Causes	Certified .. Uncertified...	537 10	121 3	24 1	36 ...	25 1	24 1	54 1	125 2	128 1	....
1.	Enteric Fever ...	...	...	...	...	...	...	...	...	...	...
2.	Small-pox ...	...	...	...	...	...	...	...	...	...	...
3.	Measles ...	4	1	1	2	...	...	...	...	...	1
4.	Scarlet Fever ...	7	...	...	2	4	1	...	...	...	5
5.	Whooping Cough ...	12	6	3	3	...	...	...	...	...	...
6.	Diphtheria and Croup ...	5	...	...	3	2	...	...	...	...	1
7.	Influenza ...	4	...	...	...	1	...	...	2	1	...
8.	Erysipelas ...	2	1	...	...	...	...	...	...	1	1
9.	Phthisis (Pulmonary Tuberculosis) ...	42	...	...	1	3	8	17	12	1	13
10.	Tuberculous Meningitis ...	4	1	...	1	1	1	...	...	...	2
11.	Other Tuberculous Diseases ...	10	3	1	2	2	1	...	1	...	2
12.	Cancer, malignant disease ...	39	...	...	...	...	...	3	21	15	17
13.	Rheumatic Fever ...	4	...	...	...	...	1	2	1	...	...
14.	Meningitis ...	6	2	1	1	2	...	...	...	...	2
15.	Organic Heart Disease ...	34	...	1	...	...	...	...	...	...	13
16.	Bronchitis ...	52	11	3	3	...	...	2	18	15	11
17.	Pneumonia (all forms) ...	41	8	7	2	2	1	5	13	3	14
18.	Other diseases of respiratory organs ...	2	...	...	...	...	...	...	2	...	1
19.	Diarrhoea and Enteritis ...	16	15	1	...	...	...	...	...	...	2
20.	Appendicitis and Typhlitis ...	2	...	...	...	1	1	...	...	...	7
21.	Cirrhosis of Liver ...	9	...	...	...	...	...	2	5	2	2
21A.	Alcoholism ...	1	...	...	...	...	...	1	...	...	...
22.	Nephritis & Bright's Disease ...	14	...	1	2	...	2	1	6	2	6
23.	Puerperal Fever ...	3	...	...	...	...	...	3	...	...	2
24.	Other accidents and diseases of Pregnancy and Parturition ...	1	...	...	...	...	1	...	...	...	1
25.	Congenital Debility and Malformation, including Premature Birth ...	58	55	2	...	1	...	...	...	...	12
26.	Violent Deaths, excluding Suicide... ..	15	...	1	6	1	2	1	4	...	31
27.	Suicide ...	4	...	...	...	...	...	1	3	...	...
28.	Other Defined Diseases ...	139	10	2	8	5	5	9	27	73	99
29.	Diseases, ill defined or unknown ...	18	11	1	...	1	1	1	2	1	2
TOTALS ...		548	124	25	36	26	25	55	127	130	24

OTHER DEFINED DISEASES.—Table III. gives the number of deaths from various causes, and among them 138 as the number of deaths from "Other Defined Diseases." They are as follows:—

	Nett deaths at the subjoined ages of Residents whether occurring within or without the district.								
	All Ages	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65 and over
CIRCULATORY DISEASES.									
Arterio Sclerosis ...	4	...	...	...	...	...	...	1	3
Aneurysm... ..	...	...	...	...	...	...	...	...	...
Cerebral Hæmorrhage ...	27	1	...	...	1	1	...	1	...
Endocarditis ...	3	...	...	...	...	...	...	8	18
Myocarditis ...	1	...	...	...	...	...	...	1	...
Pericarditis ...	1	...	...	...	...	...	1	...	...
Purpura ...	...	...	...	...	...	...	...	...	...
Gangrene ...	2	...	...	...	...	...	...	...	2
Ruptured Fatty Heart ...	1	...	...	...	...	...	...	1	...
GENERAL DISEASES.									
Old Age	34	...	...	...	...	...	...	...	34
Rickets	2	...	...	2	...	...	...	...	...
Syphilis	4	2	2	...	...	...	...	...	...
Rheumatoid Arthritis ...	3	...	...	...	...	...	...	...	3
Diabetes	3	...	...	...	...	1	...	1	1
Icterus Neonatorum ...	...	...	...	...	...	...	...	...	...
Leucæmia... ..	1	...	...	...	...	...	...	1	...
Pernicious Anæmia ...	2	...	...	1	...	...	...	1	...
Anæmia ... ..	...	...	...	...	...	...	...	...	...
Atelectasis	2	2	...	...	...	...	...	...	...
Exophthalmic Goitre ...	1	...	...	...	...	...	1	...	...
Injury at Birth ...	1	1	...	...	...	...	...	...	...
German Measles... ..	1	...	...	...	1	...	...	...	...
DISEASES OF NERVOUS SYSTEM.									
Epilepsy	2	...	...	...	...	...	1	1	...
General Paralysis ...	2	...	...	...	...	...	1	1	...
Cerebral Tumour ...	2	...	...	...	...	...	...	1	1
Spinal Sclerosis ..	1	...	...	...	...	...	1	...	...
DISEASES OF DIGESTIVE SYSTEM.									
Intestinal Obstruction ..	5	1	...	...	1	...	2	...	1
Gastritis	4	1	...	...	...	...	...	1	2
Gastric Ulcer	2	...	...	...	...	2	...	...	...
Ulceration of Bowels ...	1	...	...	...	...	...	...	1	...
Cholecystitis	1	...	...	...	...	...	...	1	...
Diarrhœa and Enteritis...	9	...	...	5	...	...	1	1	2
Malnutrition	1	1	...	...	...	...	...	...	...
LOCAL DISEASES.									
Stone in Kidney ...	1	...	...	...	...	...	...	1	...
Tumour of Bladder ...	...	...	...	...	...	...	...	...	...
Cystitis	1	...	...	...	...	...	...	1	...
Urethral Calculus ...	1	...	...	...	...	...	...	...	1
Otitis Media	3	1	...	...	1	...	...	1	...
Tonsilitis	1	...	...	...	1	...	...	...	...
Cellulitis	3	...	...	...	...	...	...	1	2
Carbuncle	2	...	...	...	...	1	1	...	...
Ostitis	1	...	...	...	...	...	...	1	...
Enlarged Prostate ...	3	...	...	...	...	...	...	...	3
Totals... ..	139	10	2	8	5	5	9	27	73

DISEASES ILL-DEFINED OR UNKNOWN.—In Table III. are given the number of deaths from all causes, and among them are 18 who died from diseases “ill-defined or unknown.” This category is inclusive of 10 uncertified deaths. They are as follows:—

	YEARS.								TOTAL.
	0—1	1—2	2—5	5—15	15—25	25—45	45—65	65 and over	
Convulsions	7	1	...	...	...	...	...	...	8
Marasmus	1	...	...	...	...	...	...	...	1
Natural Causes	...	...	...	...	1	1	1	...	3
Premature Birth ..	1	...	...	...	...	...	...	...	1
Apoplexy ..	...	...	...	...	...	...	1	...	1
Anæmia ..	1	...	...	...	...	...	...	...	1
Congestion of Lungs	1	...	...	...	...	...	...	...	1
Bronchitis...	...	...	...	...	...	...	...	1	1
Diarrhœa ..	...	...	...	1	...	...	...	...	1
Totals ...	11	1	...	1	1	1	2	1	18
Certified ...	8	...	...	...	...	...	...	...	8
Uncertified	3	1	...	1	1	1	2	1	10

Their proper allocation is as follows:—

- 70 belonged to the Chesterfield R.D.
- 32 to Newbold and Whittington U.D.
- 22 to Clay Cross U.D.
- 19 to Bolsover U.D.
- 4 to Dronfield U.D.
- 3 to Clowne R.D.
- 2 to Brampton and Walton U.D.
- 2 to Derby County Borough.
- 1 to Stamford Borough.
- 1 to Salford County Borough.
- 1 to Blackwell R.D.
- 1 to Belper U.D.

Total foreign deaths: 158.

The deduction of these, and the addition of those of 27 persons belonging to the Borough who died in public institutions outside it, gives 548, of which 305 were those of males and 243 those of females, as the number, corrected for public institutions only, to be attributed to the Borough. It is equal to a DEATH RATE of 13.54 per 1000. This figure multiplied by 1.0589, the factor for correction for age and sex gives 14.33. The standardized rate in England and Wales was 13.6, that in 96 great towns 14.9, and in the 145 smaller towns 12.9.

The rate in the North Ward was 11.6, in the South 10.9, in the West 15.0, and in the Central 16.0. The causes of death are given in Table III.

There were 52 inquests held on deaths occurring in the Borough, the causes of death being certified by the Coroner as under: Residents 20, Strangers 32.

Cause of Death.	Borough	Strangers.
Natural Causes.		
Rupture of Heart	1 ...	—
Cancer	— ...	1
Appendicitis	— ...	1
General Accidents.		
Burns	— ...	5
Scalds	2 ...	—
Injury to foot	— ...	1
Operations	— ...	2
Over lying, asphyxia ...	— ...	1
Accidental fall	1 ...	4
Injury by thrown stone ...	— ...	1
Drowned in Dolly Tub ...	2 ...	—
Drowned in River	2 ...	—
Found drowned	1 ...	—
Run over by motor car ...	1 ...	1
Run over by locomotive ...	1 ...	1
Run over by toboggan ...	— ...	1
Colliery Accidents.		
Fall of roof	3 ...	3
General Injury	— ...	2
Crushed by tubs	— ...	4
Engineering Works Accidents.		
Fall of Material	— ...	1
Fall of Machinery	1 ...	—
Coke Works.		
Scalds	— ..	1
Building Trade.		
Fall off Ladder	1 ...	—
Suicides.		
By Cutting Throat	2 ...	—
By Hanging	2 ...	—
By Shooting	— ...	1
By Drowning	— ...	1
Total ...	20 ...	32

Interments were carried out at the Cemetery, St. Thomas' Church, Christ Church, and Elder Yard Chapel the numbers being 345, 114, 50, and 2 ; total 511.

I should like to take this opportunity of thanking those gentlemen by whose courtesy the above figures were obtained.

G.—MEANS FOR PREVENTING MORTALITY IN CHILD BIRTH and INFANCY.

(1).—NOTIFICATION OF BIRTHS ACT, 1907.

Notifications received	...	...	...	...	1216
By Medical Practitioners	...	...	...	...	112
,, Midwives	...	...	...	...	1067
,, Parents	...	...	...	...	37
Number of Illegitimate Births...	...	...	...	...	47
,, ,, Still Births...	...	...	...	...	44
,, ,, First Visits...	...	...	...	...	1123
,, ,, Re-Visits	...	...	...	...	834
Sanitary Defects reported to Inspector of Nuisances...					18

The visitation of births is carried out in all parts of the town, not only the poorer parts where the infants are liable to neglect, but among the better districts where there are many young mothers who are pleased to receive information regarding the best methods of feeding, etc. 93 Houses were not visited by request of the parents or Medical Attendant.

The object of these visits is to prevent mortality in infancy, which is largely due to ignorance and is capable of being reduced. Cases where infants are naturally fed do not need much attention except in cases of neglect and dirt. Particular attention is given to bottle-fed infants, when the parents are advised as to the most suitable food, and visits are paid frequently to ensure progress.

Now that the parents realize the real object of the Health Visitor's visits, she is more and more cordially welcomed in the homes, and her instructions are carried out more thoroughly.

During her visit the Health Visitor does not lose sight of the other small members of the family who, owing to lack of knowledge on the part of the mothers, are sometimes in a bad state of health due to improper food, want of fresh air, late hours, etc. Supervision of the older children is obtained through the school; cases of physical defect or of uncleanliness are visited and the conditions of the homes reported to the Sanitary Inspector, action being taken by him where necessary.

It is gratifying to note that improvement is taking place and that the parents appreciate what is being done to improve the health of their infants and the conditions of their home life.

INFANT CONSULTATION CENTRES.

The centre which was started at the Settlement in October 1913 has been continued with so much success as to induce the formation of similar institutions in each of the other three wards. A sub committee of the Health Committee with co-opted members has been formed to manage these. The Health Committee are providing funds for maintenance such as rent, printing, etc.

There is a meeting held at each centre on one day in the week. The Health Visitor attends for the purpose of weighing and advising on the rearing of infants, while a voluntary Committee undertake the management of sewing clubs, arrangements for tea and social work generally.

A prominent feature has been the excellent series of model garments for infants and young children which are cut out by the ladies in charge. As these clothes are made of good material, cut in a hygienic manner, and sold at the cost of the material a very good article is to be obtained at a minimum cost.

Where space allows, a Kindergarten is held to enable mothers to come who otherwise would be kept at home to look after the children between infancy and school age.

The "Banana Crate Cradle" has been a great success, and the Women's Adult School are making these and selling them at cost price (about 4s.). There is a great demand for these cheap hygienic and safe adjuncts to the nursery.

It is hoped that these small beginnings may pave the way for greater efforts in the direction of assisting and educating the mothers in child welfare.

(2) INSPECTION OF OUT-WORKERS OR HOME-WORKERS.

Lists of out-workers are sent periodically by employers and the homes are visited twice yearly by the Health Visitor.

Of the Out-workers	27	are engaged in net mending.
„	25	„ wearing apparel.

The conditions were found to be satisfactory.

(3) INSPECTIONS OF MIDWIVES.

This work is carried out by the County Council, and is reported upon by their Medical Officer.

BIRTH RATE.—The total number of births registered as occurring in the Borough was 1,204. Included among these are 6 belonging to other districts. There was also one birth allocated to the Borough by the Registrar General which occurred outside the Borough. Sixteen births occurred in the Workhouse, 6 of which belonged to other districts. The births are distributed as follows, the Workhouse births belonging to the Borough being distributed to their proper wards:—

	Male	Female	Ille- gitimate	Le- gitimate	Totals	Rate per 1000 living
Central ...	142	134	12	264	276	27.5
North ...	122	107	11	218	229	24.2
South ...	160	158	10	308	318	33.2
West ...	185	191	15	361	376	32.8
	609	590	48	1151	1199	29.6

The corrected number of births was 1199, which is equal to a Birth Rate of 29.6 per 1,000 living, as compared with a decennial average number of 941 and a rate of 28.9. The accompanying chart shows the steady drop in the birth rate in the Borough and a similar drop in the Rates of England and Wales and the County of Derbyshire. The mean of the rates in the Borough for the last ten years is, however, fairly constant.

					Natural Increase			
					Net	Net	Rate	
Population					Births	Deaths	Number	per 1000
1904	...	...	...	28590	909	466	443	15.49
1905	...	...	...	28890	872	384	488	16.8
1906	...	...	...	29255	830	454	376	12.8
1907	...	...	...	29583	853	474	379	12.8
1908	...	...	...	30690	909	531	378	12.3
1909	...	...	...	31243	888	457	431	13.79
1910	...	...	...	31845	871	420	451	14.1
1911	...	...	...	37550	1101	642	459	12.2
1912	...	...	...	38100	1100	500	600	15.7
1913	...	...	...	39594	1089	634	455	11.5
Average				...	...	...	...	...
1914	...	...	...	40465	1199	547	652	16.1

ILLEGITIMACY.—Illegitimacy has an important bearing on the question of infant mortality. The total number of illegitimate births was 51. After correction for those in the Union Workhouse and not belonging to the Borough the number was reduced to 46, equal to a rate of 38.3 per 1,000 births. The rates for 1913, 1912, 1911, 1910, 1909, and 1908 being 57, 43.6, 50.8, 40.1, 42.8, and 44 respectively, that of 1910 being the lowest recorded for the Borough (as was the rate of 1909 at that time). The rate for the five years ending 1904 was 52.9, and for the five years ending 1909, 53.1. The rates of England and Wales for the same periods were 39.4 and 40.1 respectively.

The rate was 48.0 in the North Ward, 31.4 in the South, 39.9 in the West, and 43.4 in the Central.

The drop in the illegitimate rate, coupled with the diminished number of infants from the Workhouse (28 compared with 16) is an index to the increasing prosperity of the town.

H.—VITAL STATISTICS OF THE DISTRICT.

TABLE I.

Vital Statistics of the Whole District during 1914
and previous years.

Year.	Population estimated to middle of each year.	Births.			Total Deaths registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number	Nett.						Under 1 year of age.		At all ages	
			Number.	Rate	Numler.	Rate.	of Non-residents registered in the District	of Residents not registered in the District.	Number	Rate per 1000 nett Births.	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1904	28590	926	909	31·6	568	19·6	102	0	155	171	446	16·3
1905	28890	896	872	30·1	481	16·6	101	4	104	119	384	13·3
1906	29255	850	830	28·4	568	19·4	117	3	151	182	454	15·5
1907	29583	872	853	28·8	582	19·7	111	3	159	186	474	16·0
1908	30690	936	909	29·6	655	21·3	127	3	137	151	531	17·3
1909	31243	896	888	28·4	565	18·1	116	8	124	140	457	14·6
1910	31845	889	871	27·4	515	16·2	105	10	138	158	420	13·2
1911	37550	1119	1101	29·3	768	20·4	146	20	194	176	642	17·1
1912	38100	1119	1100	28·8	612	16·6	133	21	106	96	500	13·1
1913	39594	1104	1089	27·5	752	18·9	139	21	156	143	634	16·0
Average for Years 1904 to 1913.	32533	954	941	28·9	606	18·6	120	9	141	148	494	15·1
1914	40465	1204	1199	29·6	679	16·7	158	27	124	103	548	13·5

Area of District in
acres (land and in-
and water) ...) 2613.

Total Population at all ages ... 37,406 } At Census
Total families or separate occupiers 7,711 } 1911.

Vital Statistics of separate Localities in 1914 and previous years in the Borough of Chesterfield.

NAMES OF LOCALITIES.	THE BOROUGH.				NORTH WARD.				SOUTH WARD.				WEST WARD.				CENTRAL WARD.				HOSPITAL.	UNION WORK-HOUSE.
	Population esti- mated to middle of each year.	Nett Births.	Nett Deaths at all Ages.	Nett Deaths under 1 year.	Population esti- mated to middle of each year.	Nett Births.	Nett Deaths at all Ages.	Nett Deaths under 1 year.	Population esti- mated to middle of each year.	Nett Births.	Nett Deaths at all Ages.	Nett Deaths under 1 year.	Population esti- mated to middle of each year.	Nett Births.	Nett Deaths at all Ages.	Nett Deaths under 1 year.	Population esti- mated to middle of each year.	Nett Births.	Nett Deaths at all Ages.	Nett Deaths under 1 year.	Population esti- mated to middle of each year.	Population esti- mated to middle of each year.
1904	28,590	909	466	155	10,323	231	147	40	8,958	314	152	48	9,309	364	167	67	9,309	364	167	67	..	..
1905	28,890	872	384	104	10,440	246	109	28	9,000	280	127	39	9,450	346	148	37	9,450	346	148	37	..	..
1906	29,255	830	454	151	10,646	233	126	35	9,077	276	153	54	9,532	321	175	62	9,532	321	175	62	..	..
1907	29,583	853	474	159	10,425	262	158	53	8,706	279	163	54	9,901	312	153	52	9,901	312	153	52	..	..
1908	30,690	909	531	137	10,860	257	172	35	9,010	326	177	51	10,250	326	182	51	10,250	326	182	51	..	..
1909	31,243	888	457	124	11,003	240	145	30	9,110	282	149	42	10,560	366	163	52	10,560	366	163	52	..	..
1910	31,845	871	420	138	11,048	261	137	41	9,165	269	137	36	10,970	341	146	61	10,970	341	146	61	..	..
1911	37,550	1101	642	194	9,035	206	163	55	8,527	257	118	30	10,213	358	188	61	9,775	280	173	48	..	..
1912	38,100	1100	500	106	9,173	217	121	14	8,653	262	83	25	10,360	343	161	44	9,922	278	135	23	..	..
1913	39,594	1089	634	156	9,318	235	148	37	9,213	262	119	36	11,118	330	156	37	9,945	262	211	46	..	..
Average of Years 1904 to 1913.	32,533	941	494	141	10,227	238	142	36	8,941	281	137	41	10,165	340	164	52						
1914	40,465	1199	547	124	9,436	229	110	25	9,575	318	105	29	11,438	376	172	46	10,016	276	161	24	162	488

TABLE IV. INFANT MORTALITY.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.		Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total deaths under 1 year.
All causes	Certified ...	36	6	3	5	50	19	23	18	11	121
	Uncertified...	1	...	...	...	1	1	...	1	...	3
Small-pox ...		...	...	...	...	...	...	...	...	...	...
Chicken-pox ...		...	...	...	...	...	...	...	...	...	...
Measles ...		...	...	...	...	...	...	...	...	1	1
Scarlet Fever ...		...	...	...	...	...	...	...	...	...	...
Whooping Cough ...		...	...	...	...	...	4	1	...	1	6
Diphtheria and Croup ...		...	...	...	...	...	...	...	...	...	...
Erysipelas ...		...	...	...	...	...	1	...	...	...	1
Tuberculous Meningitis...		...	...	...	...	...	...	1	...	...	1
Abdominal Tuberculosis(b)		...	...	...	...	...	1	...	2	...	3
Other Tuberculous Diseases		...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous)		...	...	...	...	...	...	...	1	1	2
Convulsions ...		1	...	...	1	2	3	2	...	...	7
Laryngitis ...		...	...	...	...	...	...	...	...	...	...
Bronchitis ...		...	...	1	...	1	1	3	4	2	11
Pneumonia (all forms) ...		...	1	...	...	1	...	1	2	4	8
Diarrhoea ...		...	...	...	...	...	...	...	...	...	...
Enteritis ..		...	...	...	...	...	4	6	3	2	15
Gastritis ...		...	...	...	...	...	...	1	...	...	1
Syphilis ...		...	1	...	...	1	...	1	...	...	2
Rickets ...		...	...	...	...	...	...	...	...	...	...
Suffocation, overlying		...	...	...	...	...	...	...	...	...	...
Injury at birth ...		1	...	...	...	1	...	...	...	...	1
Atelectasis ...		1	...	...	1	2	...	...	...	...	2
Congenital Malformations		1	...	...	...	1	...	...	...	...	1
Premature birth ...		28	1	1	1	31	...	...	...	...	31
Atrophy, Debility and Marasmus ...		3	2	1	2	8	6	6	6	...	26
Other causes ...		2	1	...	...	3	...	1	1	...	5
Totals ...		37	6	3	5	51	20	23	10	11	124

Nett Births in the year	{ legitimate	...	...	...	...	...	...	1151
	{ illegitimate	...	...	...	...	...	...	48
Nett Deaths in the year of	{ legitimate infants	...	...	...	...	...	...	119
	{ illegitimate infants	...	...	...	...	...	...	5

INFANTILE MORTALITY.

There were 124 deaths and an infantile mortality rate of 103 per 1,000 born, as against 156 deaths and a rate of 143 for 1912 and a decennial average of 141 deaths and a rate of 148.

Three deaths took place in the Workhouse, of which one was a "stranger," and fifteen in the Chesterfield and North Derbyshire Hospital, of which eight were "strangers" and one child belonging to the Borough died in another district.

Allocating these ten to their proper Wards, the rate of infantile mortality in the respective Wards is as follows:—

WARD.			Nett Births.	Nett Deaths.	Infantile Mortality per 1000 Births.
Central	...	...	276	24	87
North	...	...	229	25	109
South	...	...	318	29	91
West	...	...	376	46	122
Borough	...	...	1199	124	103

In considering Table IV. it should be remembered that the number of deaths from premature birth and congenital defects, and to a lesser extent the number of deaths from atrophy and marasmus, is not affected by the work of the Health Visitor, deaths from these causes being due to the pre-natal condition of the mother, such as ill-health, lack of

food, the employment of pregnant women, and the use of abortifacients. In a paper read on the subject of "Criminal Abortion and Abortifacients" by Dr. Whitley at a recent meeting of the Society of Medical Officers of Health the extent of the evil was shown. The evil consequences are seen not only where the attempt is successful, but in those attempts which fail to prevent the mother going to her full term, but result in her giving birth to a child whose chances of healthy survival have been hazarded. The enquiry made into this subject by the author referred to showed that Chestefield is a town where there is a frequent demand for diachylon. The nefarious practices referred to are supplemented by the furtive practice of travelling herbalists, ex-midwives, disreputable women, and half-concealed advertisements in the lower forms of the Press.

Among the numerous remedies which have from time to time been suggested for this state of affairs, notification of pregnancy and education of the prospective mothers holds out some promise of hope.

The following figures are abstracted from Table IV. :—

Year.	Premature Births and Congenital Defects.	Diarrhoeal Diseases.	Atrophy and Marasmus.	Convulsions.
1905 ...	24	19	16	12
1906 ...	35	36	24	13
1907 ...	37	22	32	19
1908 ...	32	33	12	7
1909 ...	40	24	23	4
1910 ...	29	28	27	9
1911 ...	29	68	33	15
1912 ...	32	11	21	10
1913 ...	28	33	29	9
1914 ...	32	15	26	7
Average of 10 years	31·6	28·7	24·3	10·3

Continuous line : Birth Rate Chesterfield.
 Dotted line : Birth Rate England and Wales.
 Red line : Birth Rate County of Derbyshire.

CHART SHEWING BIRTH RATES FOR YEARS 1893-1914.

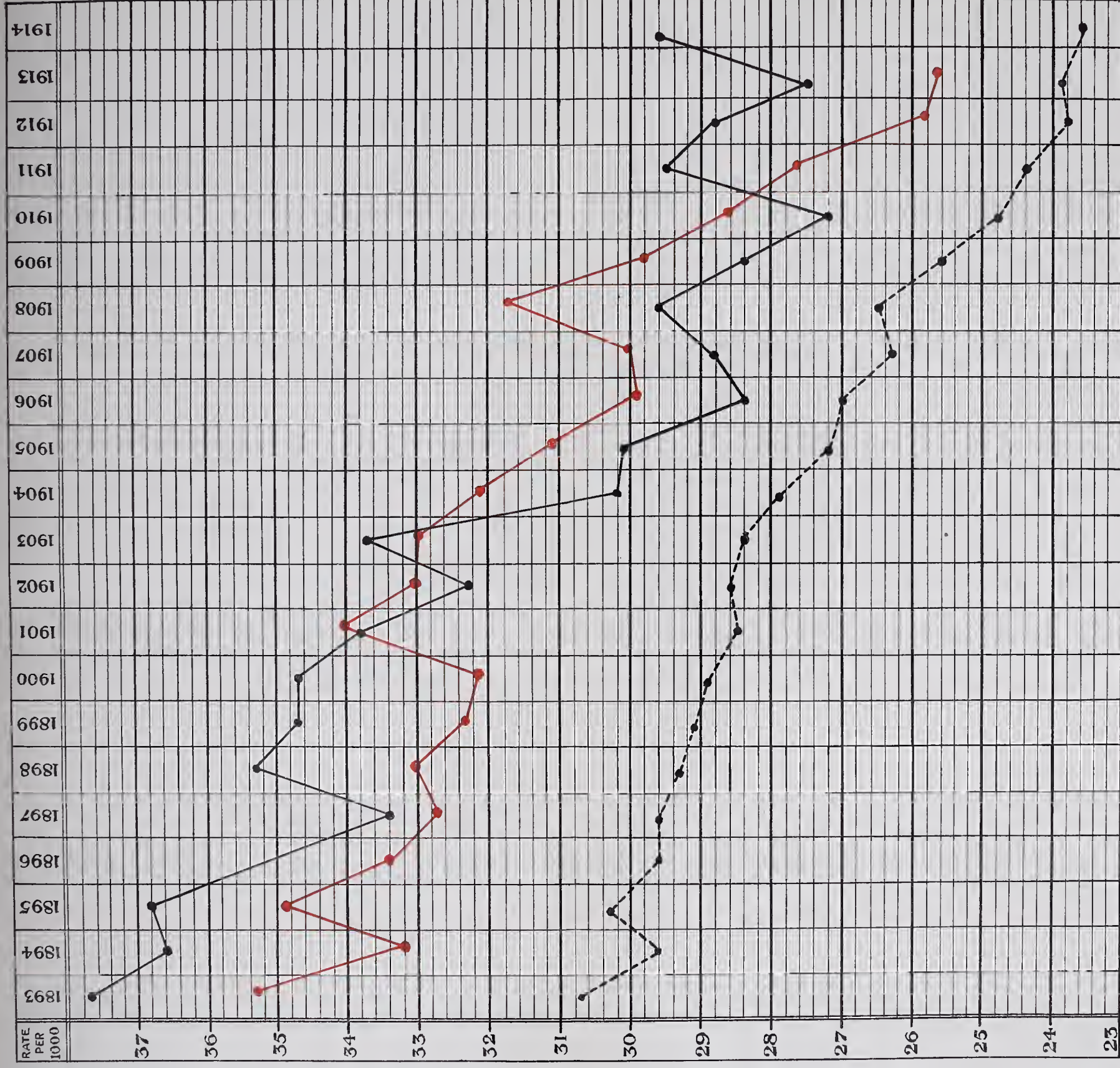
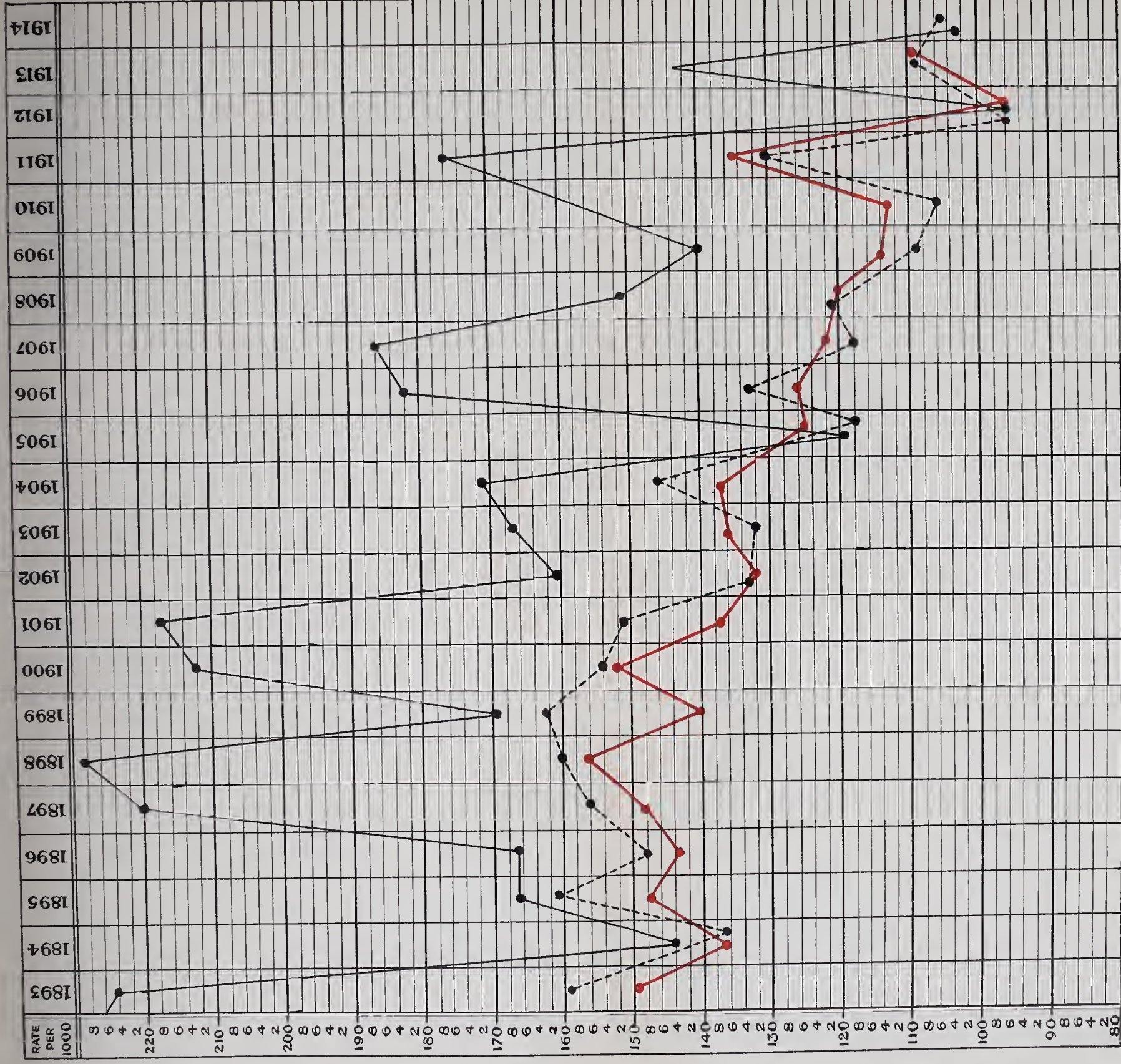
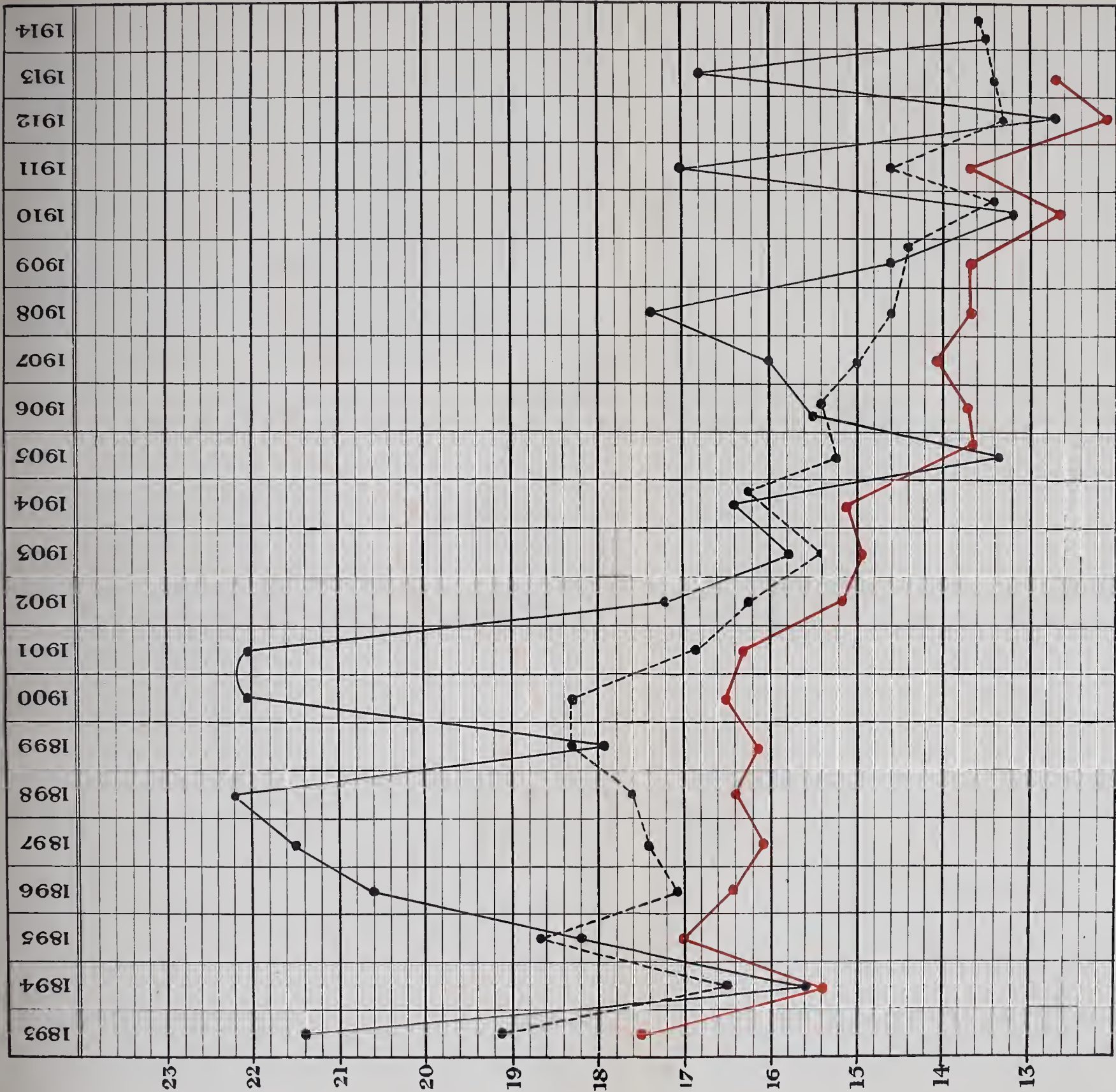


CHART SHEWING INFANTILE MORTALITY .. 1893-1914.



Continuous line Borough of Chesterfield.
Dotted line . England and Wales.
Red line . Derbyshire.

CHART SHEWING THE DEATH RATES .. 1893-1914.



Continuous line Borough of Chesterfield.
Dotted line . England and Wales.
Red line . . . County of Derby.
Death Rate for Chesterfield, 1912 should be 13-12.

